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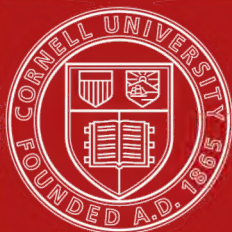
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THE SOCIALIZATION OF HUMANITY

AN ANALYSIS AND SYNTHESIS OF THE PHE-
NOMENA OF NATURE, LIFE, MIND AND
SOCIETY THROUGH THE LAW
OF REPETITION

A SYSTEM OF MONISTIC PHILOSOPHY

BY
CHARLES KENDALL FRANKLIN

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PREFACE

The object of this investigation is to trace physical, organic and social phenomena to their sources in order to discover their laws, so that the subsequent expenditure of energy in nature, life, mind and society may be determined for human welfare. It will necessitate reviewing all of the great concepts of the race, matter, motion, life, mind and society,—and will result in an attempt at a complete orientation of the race and the establishment of the principles which will lead to the democratization and socialization of humanity. The magnitude of the undertaking need not deter us, for it is by attempting the impossible that we accomplish what we are capable of.

Few persons think outside of their inherited spheres. A scientist seldom thinks it possible to find instruction in the life of a common man or the works of a theologian; while the common man passes scientific works by with the belief in their impracticability, whereas in religion a man who reaches that eminence in thought whereby he can appreciate the religion of other peoples is reviled by his associates for having no religion himself. A statesman who habitually dared to see any merit in the measures of the opposition, or who demanded progress instead of order, would be looked upon with suspicion by all and attacked with avidity by rivals in his own party. All of this narrowness, prejudice against progress and predilection for existing things, has been absolutely necessary in the long evolution of the race in order to make it conservative enough to hold fast to that which is good and thus avoid racial deterioration by following unwarranted variations from the racial type in political, æsthetic, mental, moral and religious life. But progress is as neces-

sary to racial salvation as order, because the environment is constantly changing and the race must be adapted to it. In general, however, order in society is more essential to racial salvation than progress, for in the long history of the race more tribes and nations have been destroyed by following unwarranted variations than by holding fast to inherited beliefs and practices, no matter how absurd, so they bound the tribe or nation together. Hence the powers of conservatism, through the struggle for existence, between tribe and tribe, nation and nation, have become stronger than the powers of progress, and are so to-day, despite the great intellectuality of the Nineteenth Century. Yet there comes a time in every civilization when it must vary or else become extinct according to the law of natural selection,—a time when rigid social order becomes an evil in itself, so that the original function of social order, the preservation of humanity, is perverted by protecting forms that hinder the further growth of the race; then the principles of progress are more sacred than those of order and are promulgated by the choicest spirits of humanity. This is the condition of affairs in western civilization to-day.

It stands to reason that our unscientific ancestors were of necessity incompetent to form a correct conception of the universe, to originate a true theory of things, to elaborate a scientific system of philosophy, to give the true reasons and causes of life, mind and society, or propound a rational explanation of religion that will satisfy the demands of the scientific mind of to-day, or establish a scientific system of society that will render justice to all men, thus realizing the highest development that each and every one is competent to attain. The first glimpse the human mind gets at the truth is an allegorical conception; this is gradually replaced in the course of centuries by the true explanation. We can trace the development of the unsystematized popular beliefs of the people from crude mythologies, mystic metaphysics and

dreamy philosophies up to the scientific thought of the present. But to-day all men in authority, as in every age, authors, teachers, artists, scientists, business men, statesmen, men of the world—all have an approximately correct conception of things and act upon it regardless of pretensions; however, they often try to persuade themselves that they still believe in the allegorical theory of their ancestors; and sedulously avoid any thorough investigation of nature, life, mind and society, for fear of becoming unorthodox, skeptical and atheistic. Intellectually it is with us to-day as with the Romans in the first centuries. Gibbon says:

“The various modes of worship which prevailed in the Roman world were all considered by the people as equally true; by the philosopher as equally false; and by the magistrate as equally useful.”

The world to-day morally is in the same condition as when Buddha of India came to preach a new salvation. Again the blind are leading the blind. It is in the same condition it was in when Jesus of Nazareth preached the Gospel of the Brotherhood of Man. Again unbelievers are putting reformers to death for impiety. It is in the same condition as when Socrates of Athens taught men how to live. Again do the teachers of men fail to enter into the heaven of Orientation prepared for them by the ages and refuse to let anyone else enter; and as in the days of old they add intolerance to their conservatism by persecuting those who attempt to break the incrustations of the past to let the light of truth lead humanity to its ultimate goal. The world is in the same intellectual condition as when Francis Bacon wrote his incomparable works *Novum Organum* and the *Advancement of Learning*. To-day collegiate scholarship in the name of science clogs social progress, as in the days of Bacon, in the name of Classic Learning, it stemmed intellectual progress. The world is ripe for a true system of philosophy, for a right system of living.

Unlike the world's passage from Polytheism to Monotheism, from Paganism to Christianity, from Feudalism to Capitalism heretofore made, the transition from Theology to Science, from Capitalism to Coöperation will be conscious.

In our survey of nature we shall find that it makes no difference with the elements and energies of nature how an end is accomplished. And it makes no difference with society. Human perfection, for example, cannot be attained except through property. Primitive humanity did not have it and did not know how to produce it collectively. Hence the race, not being able to originate property by collective ownership, owing to lack of intelligence and morality, ceased to be social, forsook the social acquisition of property and permitted individual ownership because it was the only way open to primitive humanity whereby it could produce the necessary wealth for the highest human development. Even to-day with us wealth can best be produced and conserved by having the capital of the race controlled by individuals; society, despite our boasted intelligence and morality, cannot do it, hence privileged classes still usurp this social function. But it will not always be so.

Government is certainly a function of the people; yet, if they cannot govern themselves, they accept a king or any form of government, an aristocracy, or a plutocracy, so it conserves their energies. It is all a question of the expenditure of energy, no matter the method. In society, as in nature, if the best cannot be had, then the next best is taken with apparently as much liking, to be discarded, however, as soon as something better is developed. It is so throughout civilization. There is no reason whatever to believe that the race will not adopt a higher form of civilization as soon as it finds the method. By the natural law of the expenditure of energy it must do so.

There is scarcely an institution, no matter how vile, that has not served the race in its long struggle upward. Slavery

made man industrious. There is scarcely a vice that has not been of incalculable usefulness. The passions are still so strong in man that one sees that he was never meant to be a human being, only an animal, that his social nature is an excrescence which, even to-day, has a lively time in the struggle for existence to maintain itself. And some of our beloved institutions will some day be seen to be only institutions of necessity and not of intelligence and morality. When social mind, what is called in this book the moral and social senses, is fully understood, nature and humanity will be read as a book that heretofore has been in an unknown language, and the future of humanity will be predicted approximately, and the race will determine its history as the individual to-day determines his conduct.

To-day as always in history, deep insight into nature, life, mind and society is not the chief merit of the philosopher, but moral courage to speak the naked truth. 'Almost any scientist to-day would be competent to give an approximately correct conception of the universe and man's relation to it, and thus inaugurate the ultimate standard of living; but owing to education, position in life, sinecures, to policy, to lack of fanaticism, which blinds one to criticism and makes one attempt the impossible, no one dare do it; all prefer to adumbrate their meaning in technical terms, ambiguous literary concepts, or allegorical symbolism. It is most unreasonable to expect that a writer would dare express the most advanced thought, so any common person could understand it, on such subjects as God, the immortality of the soul, the origin of life, the explanation of mind, the philosophy of society; or even discuss economic and moral problems in the light of the most advanced thought, when the institution from which he derives his living is founded upon concepts taken from tradition and supported by endowments that are contributed with the tacit if not avowed understanding that only the views upholding orthodoxy and

capitalism shall be taught. What we see in the human race to-day in regard to the difficulties of expressing the naked truth has always existed.

While the instinct of religion, the instinct to do some great service for the race,—to be a hero, to do good, to sacrifice one's self for humanity—is in all of us; yet, when it conflicts with present success, destroys personal ambition, practically closes all the careers of great emoluments, defeats love, and makes existence itself precarious, we forego its expression, acquiesce in orthodox views and live a life of conservatism, respectability and hypocrisy. Of necessity the most original thought must be unorthodox, must be the work of a free-lance, a Bohemian, a fanatic for truth's sake; for they alone have the opportunity to discover the truth and the moral courage to speak it.

So the merit we ask consideration for in this book is not originality of thought, yet there is original thought; is not literary art, perhaps not totally absent; is not profound erudition, although not totally wanting; but common honesty in stating in simple, unmistakable language the knowledge of the race, that others have only dared adumbrate in clouds of rhetoric or showers of scientific technicalities.

CHARLES KENDALL FRANKLIN.

CHICAGO, Jan. 10, 1904.

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Whoever hesitates to utter that which he thinks the highest truth, lest it may be too much in advance of the time, may reassure himself by looking at his acts from an impersonal point of view. Let him duly realize the fact that opinion is the agency through which character adapts external arrangements to itself—that his opinion rightly forms part of this agency—is a unit of force, constituting, with other such units, the general power which works out social changes; and he will perceive that he may properly give full utterance to his innermost conviction, leaving it to produce what effect it may. It is not for nothing that he has within him these sympathies with some principles and repugnances to others. He, with all of his capacities, and aspirations, and beliefs, is not an accident, but a product of the time. He must remember that while he is a descendant of the past, he is a parent of the future, and that his thoughts are as children born to him which he may not carelessly let die. He, like every other man, may properly consider himself as one of the myriad agencies through whom works the Unknown Cause; and when the Unknown Cause produces in him a certain belief, he is thereby authorized to profess and act out that belief. For to render in their highest sense the words of Shakespeare—

Nature is made better by no mean,
But Nature makes that mean: over that art
Which you say adds to Nature, is an art
That Nature makes.

Not as adventitious, therefore, will the wise man regard the faith which is in him. The highest truth he sees he will fearlessly utter, knowing that, let what may come of it, he is thus playing his right part in the world—knowing that if he can effect the change that he aims at—well; if not—well also, though not so well.
—HERBERT SPENCER.

It has often been said that we ought to follow truth even though no utility can be seen in it, because it may have indirect utility which may appear when it is least expected; and I would add to this, that we ought to be just as anxious to discover and root out all error even when no harm is anticipated from it, because its mischief may be very indirect, and may suddenly appear when we do not expect it, for all error has poison at its heart. If it is mind, if it is knowledge that makes man the lord of creation, there can be no such thing as harmless error, still less venerable and holy error. And for the consolation of those who in any way and at any time have devoted strength and life to the noble and hard battle against error, I can not refrain from adding that, so long as truth is absent, error will have free play, as owls and bats in the night; but sooner would we expect to see the owls and the bats drive back the sun in the eastern heavens, than that any truth that has once been known and distinctly and fully expressed, can ever again be so utterly vanquished and overcome that the old error shall once more reign undisturbed over its wide kingdom. This is the power of truth; its conquest is slow and laborious, but if once the victory be gained, it can never be wrested back again.
—ARTHUR SCHOENHAUER.

The Socialization of Humanity

CHAPTER I

AN ANALYSIS OF NATURE, LIFE, MIND AND SOCIETY— A NATURALISTIC CONCEPT OF THINGS

I.

In beginning a naturalistic investigation of the phenomena of nature, the first requisite is a scientific concept of man and the universe. Humanity is no longer looked at from a traditional point of view. A common consensus of the thought of western civilization places man at the head of the animal kingdom and explains his existence by the law of evolution. The human race has lived upon the earth for millions of years. It has reached the age of conscious existence. After arriving at maturity, and rejecting the traditional explanation of things, and looking about us at nature, studying matter and energy in chemistry and physics, investigating the energies of life and mind in biology and psychology, and meditating upon the phenomena of human thought, feeling and human conduct in economics and sociology, we are ushered into the real mystery of things, and, not to find a solution, is to suffer intolerable mental pain at our bafflement. Hence man's eternal search for truth. The life of man is so brief and the historic period of humanity so short that, owing to lack of time for observation, and time for the accumulation of materials, the action and interaction of the various energies of nature, even to-day, are almost incomprehensible to both the individual and the race. Given the energies now at work in nature, the problem is, how to

explain human existence in naturalistic terms, to answer the question: What is man? If science has taught us anything, it is that nature is self-sufficing and that life, mind and morality are but manifestations of the simpler energies of nature; that society, the animal organism, plants, chemical compounds are but forms of matter undergoing transformation, one as natural as the other. None, however, but an oriented mind can trace the evolution of life from the primal mist of the nascent solar system to the highly-developed product, social man, as seen in western civilization to-day; for the uninitiated are soon lost in the labyrinths of ignorance and error. Nothing except a profound study of astronomy, physics, chemistry, geology, biology, psychology and sociology can enable one to make a naturalistic concept of man take the place of the simple concept of tradition. But by constantly pondering on the universal process of nature, man can at last trace his kinship to matter and energy, and understand his antecedents in the primal elements and energies of nature. We are a great mystery to ourselves—the unraveling, however, is not accomplished by wonder and amazement, but instead by honest, untiring study, patient and candid investigation.

II

The question may be asked: What is the use of knowing what we really are and what the universe is? Such fundamental knowledge is of the same use as all knowledge; that man may the better adapt himself to his environment in nature and society. The function of all knowledge is to acquaint us with our environment so that we may adapt ourselves to it, and thereby perpetuate our existence. General concepts really have more effect upon us than special concepts. It is really of more importance to know what the universe is, and how it is run, and what man is, and his relation to the universe, than the special knowledge, where

we are to get our daily bread; for the getting of our daily bread, primarily depends upon our concept of the universe and our relation to it. A savage, whose theory of things is that back of every phenomenon is a monster whose wrath must be appeased by human sacrifice, is made a savage by such a philosophy as much as, being a savage, he originates such an explanation of things. For if such a savage be reared and educated in civilized society, and be taught a naturalistic theory of things, he will be horrified at the conduct of his savage brothers. This shows us that the quality of life of a given person, ourselves for example, depends upon his theory of things far more than the accidents of every-day life. What we are here for depends upon what being here consists of. Whether we are here to realize the highest possible development of all of our powers, physical, mental and moral, the naturalistic concept of man in nature; or that we are here at the caprice and pleasure of an imaginary God in the sky in league with his vicegerents and minions, priests and kings, here on earth, who interpret our destiny to be service to God and them in this world, to be compensated for in an hypothetical world back of things, an unthinkable space in which we are transformed into impossible beings, to live an inconceivable existence, for an interminable length of time,—the concept of tradition, is the all-important question that not only determines our daily bread, but the quality of our complete life. The economic basis of society is determined by man's theory of things. The socialization of the race can only be realized in a state based on a scientific concept of things, and a church that makes morality the stimulus of religion. If a naturalistic theory of things, man and the universe, is accepted, then real facts are the only determinants of man's position in life; if the traditional concept is accepted, then man is a slave to an imaginary god or devil and their vicegerents and minions here on earth, and existence is a fixed condition of servitude,

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instead of a glorious career of development. It is all important that the true concept of man and the universe be the basis, not only of the life of the individual, but the greater life of society. Then whatever life is, each individual will get his share of it determined by the exact facts in the case. The real defects in western civilization cannot be remedied except by an application of the true philosophy of man and the universe. It is upon this foundation that humanity can develop a system of morality that will enable a person to do unto others as he would have others do unto him; and the minions of society, created by the traditional theory of things, will be of the past, and the perfection of the common individual will be the function, not only of nature, but of society.

III

There is no object in all nature so bewildering to contemplate as the starry heavens; nothing so futile as the attempt to form a concept of the universe out of the seeming chaos. The constitution of our minds demands a philosophy of everything, yet the contemplation of the universe shows us in all of our investigations that it is unlimited and absolutely inconceivable. The human mind is not commensurate with the universe, but only nature immediately around us. The universe is infinite, the human mind finite. In order to conceive a thing we must get around it, limit it, but for every limit the mind places upon the universe for conceptual purposes, there appears an unlimited universe beyond. We give up the task in despair. The universe is framed on seemingly an altogether different plan from that of the human mind. As far as the most powerful telescope can reach into the depths of space, we find suns and planets in the same profusion as in our own immediate vicinity. As the human mind is a reaction of the environment, as we shall find in our investigation, some future discovery will render the universe conceivable, as the

discovery of the rotundity of the earth, and the formulation of the law of gravitation, made a true concept of the earth possible. In the course of its brilliant career, the human mind will meet with experiences that will render possible concepts now unthinkable. But to-day there is nothing in all the realm of thought that shows the impenetrable mystery of things and human impotency more than man's bafflement in contemplating the unlimited space of the starry depths. In the presence of this awful, infinite phenomenon, man comes to himself and realizes that he is not a minion of nature, as tradition has caused him to believe, but instead, a being unfavored, unfriended by the Infinite, only the ultimate product of the ceaseless strivings of the elements and energies of nature.

The human situation looked at from the naturalistic point of view may have a grimness about it that is calculated to deter timid souls from further investigation; however, it was no such spirit as this that made of man the being he is to-day; but instead the opposite spirit—that of courage, love of truth, and faith in the ultimate triumph of humanity in solving the riddle of the universe. It may be poetic to stand in awe before the mysterious phenomena of nature, but it is scientific to try to unravel them for the benefit of humanity. And it is in this spirit that we attempt the stupenduous problem of Whence, Whither, Why!

The universe is an organization so vast that in comparison with the animal organism, or the social organization, the analogy seems to be a mere figure of speech; however, it is not so, but instead a fundamental truth of philosophy.*

* "The celebrated Robert Boyle regarded the Universe as a machine; Mr. Carlyle prefers regarding it as a tree. He loves the image of the umbrageous Igdrasil better than that of the Strasburg clock. A machine may be defined as an organism with life and direction outside; a tree may be defined as an organism with life and direction within. In the light of these definitions, I close with the concept of Carlyle. The order and energies of the Universe I hold to be inherent and not imposed from without; the expression of fixed law, and not arbitrary will, exercised by what Carlyle would call an Almighty clock-maker.

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The units of its structure are the various elements; its functions are performed by the physical energies. As an organization the universe is the least developed of any we know, yet its structure is so arranged that its energies invariably expend themselves in the same ways, such expenditure being natural laws. It is difficult for the mind of man to understand what is going on out in the universe beyond the solar system. It is so far away from him, and heretofore, it has been deemed to have so little or no influence upon his destiny, that whether or not he knew anything about it was thought to make no difference. But to-day it is otherwise; for in our age of science a rational system of living must be based upon a rational concept of the universe. It is the starting point in the solution of the problems that immediately confront man; it is the foundation of an oriented civilization.

The universal process seems to be a development, starting with the unaggregated nebulous matter of the primal solar system, and ending in the social aggregate as seen in the civilized world to-day. That there was a time when the laws of the solar system as we know them did not exist, is certainly true. There can be no laws of hydrostatics until some liquid succeeds in existing; and no science of statics until solids are developed; and the same laws of development found to obtain in biology and sociology hold sway in inorganic nature, the law of natural selection, and the law of repetition. There has been an evolution of chemical compounds the same as there has been an evolution of plants, animals and human society. The laws of natural selection and repetition hold good throughout nature. Just as we see the social organization to-day developing structure and laws to suit its structure, that is, variable, determinable ways of

But the two conceptions are not so much opposed to each other after all. They equally imply the interdependence and harmonious interaction of parts, and the subordination of the individual powers of the universal organism to the working of the whole."—PROF. JOHN TYNDALL, *Science of Man*.

expending its energies, so the primitive solar system had to develop structure and function out of its units and energies, whatever they may have been. As soon as nature in the solar system developed inorganic substances of a highly complex kind, they became the factors for the development of vegetable and animal organisms. As soon as animal organisms reached a certain degree of individuality, they became the factors of social aggregations, until finally with the development of man, society is produced. It will be seen that nature is but a series of organizations developed from organizations; and what was the beginning and what is to be the end, is left to hypothesis and deduction. Nature outside of our limited sphere is a perplexing mystery. Knowledge begins with matter and energy, and ends by explaining all nature in their terms. We are limited on the one hand by the infinitely little, the atom; on the other by the infinitely large, the universe. Between these two extremes, the human mind is adequate to classify all the phenomena of nature, and give a consistent and logical explanation of them. But such immediate knowledge of the environment is a key to the whole universe, if we only knew how to use it. And while the human mind was developed with the practical function of adapting man to his immediate environment, yet the theoretical understanding of the ultimate phenomena of nature is within its purview, as the fascination of such research attests; so, in our survey of nature, we may as well, first as last, know that the ultimate secrets of the universe are within the limits of our investigation.

IV

We know a great deal about matter in its gross form; our knowledge is all theory when it comes to understanding its inmost nature. The dynamic theory of matter is that it is composed of centers of motion; that its atomic motions

cause all of its combinations—first element, then chemical compound, then organic compound, then social compounds; that these bodies are poised by the balanced motions of their units in some such way as are the heavenly bodies in space; and that the compounds, organisms and organizations formed, with their motions are all the resultant of the original atomic motions as they are conditioned by external energies.*

But while the atomic motions, gravitant energies, cause all the combinations of matter; yet their activity depends upon radiant energy in the form of heat, light, electricity, and so forth. If the heat be intense enough, there can be no combination of matter at all, the hypothetical condition of matter at the beginning of the solar system; and if there were no heat at all, the hypothetical condition of matter when the universal process shall have been completed then, there could be no combinations of matter at all. But between these two extremes the possibilities of the combinations of matter, gravitant energy, depend upon the various radiant energies which form the conditions of matter and determine its possible combinations.

As we know nothing of the ultimate constitution of matter, so we know nothing of the ultimate constitution of energy. Our minds can comprehend only manifestations of energy from a utilitarian point of view. We know the effects of all energies upon ourselves; but their ultimate

*Dr. Michael Foster says: "The more these molecular problems of physiology are studied the stronger becomes the conviction that the consideration of what we call structure and composition, must in harmony with the modern teachings of physics be approached under the dominant conception of modes of motion. The physicists have led us to consider the qualities of things as expressions of internal movements; even more imperatively does it seem to us that the biologist should regard the qualities of protoplasm including structure and composition as in like manner the expression of internal movements. He may speak of protoplasm as complex structure, but he must strive to realize that what he means by that is a complex whirl, an intricate dance, of which chemical composition, histological structure and gross configuration are so to speak the figures; to him the renewal of protoplasm is but the continuance of the dance—its functions and actions, the transference of the figures."

nature is hidden from us by the practicality of our senses. However, what we lack in knowledge we make up in theory. All the manifestations of energy in nature have been reduced to two forms: gravitant energies, which constitute matter, and radiant energies, which constitute the conditions of matter. The gravitant energies constituting matter are permanent, unchangeable, yet in chemical and organic compounds, for the time being, they lose their qualities and take on others seemingly totally different, thus producing the most surprising phenomena, but always holding within themselves the power to revert to their original forms and qualities and always doing so. For example, the tissues of the human body are composed of hydrogen, oxygen, nitrogen and carbon. The properties of these specific substances are for the time being lost, and in their combined form, they take on others such as contractility and irritability. But by chemical analysis a piece of human tissue can be reduced to its original elements, and it will be seen that they have not diminished in quantity, and have not lost any of their properties from the combination. At each combination of the simple elements, new properties are displayed, until by combination and recombination, finally living tissue is produced. On the other hand the radiant energies constituting the conditions of matter are all convertible, and there seems a possibility of reducing all radiant energies to one form. For example, heat, light, mechanical energy and electricity are all convertible. The heat of the sun stored in coal is transformed into mechanical energy through steam, and the mechanical energy in the dynamo is changed into electricity, and the electricity in the trolley car is again transformed into mechanical energy, used in locomotion, and dissipated in friction as heat.

It has been the dream of chemists to reduce all matter to one ultimate form, but heretofore it has always been a failure, and there does not seem to be any real reason to

believe it will ever be accomplished. Matter is the static form of energy; energy is the dynamic form of matter. The energy of matter is gravitant, rotary; radiant energy, light, heat and electricity is linear. All the visible forms of matter—the stars, the sun, its planets and satellites—have a rotary motion. It is reasonable to suppose the atoms of matter in compounds are rotating, and are held in their respective places by some such process as are the heavenly bodies in space. All explosive compounds show with what force the substances of the compounds are held together. And in animals the energy of the organism is at least in part gotten from chemism. Gravitant and radiant energy are closely related for the chemical action of acids on metals is one of the sources of electricity, and animal energy may be due in part to electricity.

Light, heat, and all of the physical energies are profound mysteries. All radiant energy must be linear or else it could not extend across the solar system. What it is, in terms of something else, is unknown; it is only known by its effects upon us.

The various phenomena of nature, stellar, solar, terrestrial, inorganic, organic and social are caused by the interaction of these two forms of energy. The primary qualities of matter, gravity, cohesion, metabolism, association, are due to rotary, gravitant energies; the secondary qualities of matter, color, heat, and electrification, are due to radiant energy. All compounds of matter—chemical compounds, organic compounds and the association of human beings are produced by the original atomic motions of chemical compounds, and all the complicated forms of energy, feeling, thought, emotion, knowledge, are a product of the physical energies of nature, light, sound, mechanical energy, and so forth, as stored in the human organism and language and institutions after countless ages of experience with the energies of nature and the energies of society.

V.

Before the evolution of life and mind, all the phenomena of nature were subject to the three laws of motion, and resulted in the first form of order in nature. It is through these three laws of motion, three ways for the dissipation of energy, that we understand the various combinations of atoms and molecules, and organizations in physical, inorganic nature. The three laws of motion are as follows:

1. Every body continues in its state of rest or uniform motion in a straight line, except in so far as it may be compelled by impressed force to change that state.

2. Change of motion is proportional to the force applied, and takes place in the direction of the straight line in which the force acts.

3. To every action there is always an equal action in an opposite direction.

This is the statement of the three laws of motion as worked out by Sir Isaac Newton. They may be summarized in the one law that energy in physical inorganic nature always takes the line of the least resistance as determined by the contending energies. Really there are but four laws for the dissipation of energy in the universe, the first being that all energy in physical, inorganic nature takes the line of the least resistance as determined by the contending energies; but in deference to Sir Isaac Newton, I have let his classification stand, and have numbered the laws that I have formulated as the fourth, fifth and sixth laws of the dissipation of energy; the fourth law being the dissipation of energy by the intellect, the fifth being dissipation of energy by the moral sense, the sixth law being dissipation of energy by the social sense, to be discussed and elaborated fully in the sequel.

It is impossible for us to know that atoms and molecules expend their energies along the line of the least resistance, as determined by the contending energies; but it is perfectly

reasonable to suppose they do, for nature is one continuous whole. It will be observed that according to Newton's three laws of motion all of the energy acting to produce any given phenomenon is used up at one fell stroke. If two moving, inanimate bodies in nature oppose each other, all of their energy is neutralized in opposition. Seldom in nature does any action or interaction of moving inanimate bodies end in anything but waste of energy. There is not much coöperation among men, less among animals, practically none whatever in physical, inorganic nature. Nature is the most extravagant organization imaginable, the most wasteful. Inorganic nature, from the origination of the solar system to the action and reaction of the elements and energies on the earth, does not display any principle but blind, wasteful dissipation of energy according to the three laws of motion. This does not mean that the energies are destroyed, but that they accomplish no definite work. They are dissipated in neutralization and opposition and accomplish nothing. They are wasted in the sense that, being capable of doing useful work, they accomplish nothing but useless dissipation.

It is true that the wasteful expenditure of the energies in nature, in the action and reaction of bodies upon one another, result in conditions favorable to life and mind here on earth; and for that matter, no doubt, throughout the whole universe; because the creation of intelligent beings is as much within the province of the cycle of every solar system in the universe as the origination of all of its other forms. Man is as natural a form of matter under given conditions as a chemical compound, and, given the elements and the conditions, both inevitably result. Things, in the course of the universal process throughout the universe, have adjusted themselves, or will adjust themselves blindly, not only on our planet, but on all others, at some time or other, so that throughout the universe there is a blind supplementing of the various kinds of dissipations of energy,

which result in coincident favorable conditions, giving rise to a semblance of intelligent adaptation. For example, the conditions of our earth in regard to its suitability for plant, animal and social existence.

But what does the apparently intelligent arrangement amount to when we estimate all of the waste? Think of the energies that could be expended more economically than they are, if any being, even with man's intellect, had the power to use them! Take, for example, the ill-arrangement of the rainfall upon the earth. Think of the great amount of rain that goes back into the ocean, never having touched the parched and arid plains needing it so much; of that which falls on the bleak rocks and inaccessible wastes, yet there is an infinitesimal amount of rain that falls on suitable places and at suitable times, which, with the coöperation of sunlight, enables plants and animals to live. Think, too, of the enormous waste of sunlight, yet some of it, only a small per cent, the rest being lost in space, makes the earth habitable. So inorganic nature is controlled by blind mechanical laws, and, if benefits result, it is purely fortuitous. Things are as they are because both matter and energy are indestructible, and no matter the arrangement, the result enables matter to complete its cycle of development, from chemical compound to human society, as will some day be definitely proved by showing the habitability of all of the planets, or their ultimate habitability in the course of time. Life and mind are developed in spite of nature not with its assistance. It is the nature of matter and energy to develop life and mind and human society as it is for them to manifest themselves in any other way. Every thing we see is natural.

The dissipation of all energy before the origin of life and mind was aimless. It is so now in the realms of nature uncontrolled by animal life or man. The possibilities of matter and energy are wonderful, but owing to unintelligent arrangement throughout the starry systems, the solar system

and inorganic nature here on earth, it accomplishes nothing but aimless actions, now and then, relieved by a happy coöperation, due to the fortuitous interaction of blind energies. If man had the power, even with his puny mind, he could make improvements in the solar system that would direct its wasting energies to human advantage, and he could make out of the earth a veritable paradise; but with his limited power to-day, he can only criticise, not amend.

I know the answer to all this is that we do not know what ulterior purpose all this waste of energy in nature may serve. It may be deemed pious to sit in wonder at our own ignorance, but it is not scientific. So far as we are concerned, there is no purpose, if we cannot discover one. We must accept things as they are. We gain nothing by being afraid we will hurt nature's feelings by telling the truth about it.

If the elements and energies of nature were not susceptible of any ways of dissipating energy other than the three laws of motion, then the universal process would have stopped with inorganic compounds. Happily the elements and energies of nature in their infinite strivings and fortuitous combinations developed new possibilities. The elements and energies of nature, in the universal process we see going on throughout the universe, reached the high degree of evolution of purely chemical compounds here on earth, then the action and interaction of the physical energies of nature upon these compounds produced an entirely new world, consisting of life and its possibilities, resulting in a new law of the dissipation of energy, and a new form of order, being the individual controlled by intellect. And the world of living beings, after developing man, ends in another world of still superior kind, with still higher laws of the dissipation of energy, and still a higher form of order, consisting of human society controlled by morality. There are thus three great classes of phenomena in nature, each with its special kind of

laws of the dissipation of energy; but the laws of the first class extend to the second, and the laws of the second to the third, being nature, the individual and society. Nature is one continuous whole, but susceptible of many combinations. The units of the first world, atoms, controlled by the three laws of motion end in their highest possible development, chemical compounds. Then chemical compounds become the units of the second world, the individual; and the individual, controlled by the laws of morality, the moral and social senses, ends in the highest possible organization of matter and energy on earth, society. The laws of mind do not supplant the laws of motion, nor the laws of morality supplant the laws of mind, but in each case only supplement one another.

All energy in nature is expended along the line of the least resistance or greatest attraction. This is the most fundamental law of nature. It has three forms: energy as expended in physical nature, energy as expended in organic nature, and energy as expended in society. The first form of the expenditure of energy is the blind battling of natural energies in which all energy expends itself along the line of the least resistance or the greatest attraction as determined by the contending energies in opposition and neutralization. This is the condition of matter and energy in the stellar and solar systems. It is the condition of matter and energy here on earth as seen in inorganic compounds. In this first form of the law of the expenditure of energy there is no economy in the sense of saving. The universal process we see going on out in the depths of space is due to the blind battling of natural energies, and ends in a fixed order of equilibrated forces; and the same is true of the inorganic compounds here on earth.

The second form of the law of the expenditure of energy is, that energy is expended under the guidance of mind, by mind meaning all nervous phenomena as is seen throughout

the animal kingdom, and ends in a system of variable order one grade higher than the fixed order of inorganic nature. Under the first law of the expenditure of energy all the energy of the interacting bodies is used up to the particular advantage of none of the interacting bodies, the energies simply neutralizing one another in opposition, expending themselves along the line of the least resistance or the greatest attraction. But under the second form of the law of the expenditure of energy, the interacting bodies not only use all of their own energies but also the energies of external nature to preserve, perpetuate and perfect their existence. The first function of mind, the highest manifestation of the second form of the law of the expenditure of energy, is to direct the energy of the organism possessing it; its second function is to direct the blind energies of nature so that the organism may the better adapt itself and its species to the environment. Mind is the reaction of the environment upon a sensitive form of matter competent to receive it. The environment acts as a mold to fashion life to fit it. Life and mind are what they are as responses to the environment. Life and mind are variables that change as the environment changes. This is seen everywhere in nature, and nowhere more fully than in the history of mankind. The possibilities of human life are great because under this second law of expending energy, directed by the human mind, all of the energies of the human organism, and nearly all of the energies of nature, can be turned to individual advantage, and the concept of economy, in the sense of saving, in the sense of turning energy to human advantage, is seen for the first time throughout nature. All energy under this second form of the law of the expenditure of energy is for the first time in nature expended according to design, purpose. Ultimately the individual becomes the object for which all nature strives and labors, and the energies that heretofore have dissipated themselves blindly, under the first form of

the law, are used in their expenditure by the intelligent individual to his own advantage. And the form of order resulting is distinct from the order resulting from the first form of the law, the blind battling of natural energies, being a moving equilibrium of forces. The first form of the law of the expenditure of energy results in a fixed order, and is accomplished by the neutralization of all the energies of the interacting bodies in opposition, while the order resulting from the second form of the law of the expenditure of energy is variable and is due to the interacting energies of the various bodies—human beings and external energies—directed to the advantage of themselves, none of it being wasted in dissipation or neutralization. When two inanimate objects come within each other's field the energy of each is used up in the reaction and neither is in the least benefited. Not so with living beings. When they come within each other's field the energy of each is used to keep itself from destruction or to perpetuate its life, and if the animals are friendly their energies are often expended in coöperation and none of it is lost. In addition to this, with human beings, the energies of nature are used to human advantage. Under the first form of the law of the expenditure of energy in nature all of the energies are wasted; under the second form they are expended to the advantage of living beings and end in the development of the individual, the highest product of what mind can do in nature.

The third form of the law of the expenditure of energy in nature is seen in human association, tribes, nations and the race and results in the highest form of order and the greatest economy of energy seen in the universe—human energy expended according to the moral and social senses. The expenditure of energy directed by mind is an improvement upon the blind battling of energies in nature and begins where the other ends. And just as mind directs the blindly

expended energies of nature to individual advantage, so the social expenditure of energy, the third form of the law of the expenditure of energy in nature, through the moral and social senses directs the intelligently expended energies of individuals to social advantage—the highest individual advantage. Just as the energies of nature ended in neutralization and exhaustion, resulting in a fixed order, so does the battling of the energies of individuals uncontrolled by society in any form, the tribe, nation or race, through neutralization and opposition of human energy, end in a dynamic order. And just as the individual by mind has turned almost all of the energies of nature to his own advantage, so it is the function of society, through the third form of the law of the expenditure of energy in nature, to turn to social advantage, the highest individual advantage, all the energies of the individuals constituting society. Further than this, just as the blind battling of natural energies developed mind by reaction for their controlment, so the expenditure of individual energies in society has developed in the tribe, the nation, and will ultimately develop in the whole race, moral and social senses for the perfect controlment of the individual. All energy in nature expends itself along the line of the least resistance or the greatest attraction under three forms of determination: might, mind and morality. The first law of the expenditure of energy is the expenditure of energy according to the three Newtonian laws of motion, the second is the expenditure of energy according to the fourth law of motion as worked out in this investigation, the expenditure of energy according to intellect, and the third law of the expenditure of energy is according to the fifth and sixth law of motion, energy expended according to the moral and social senses.

Thus we have three distinct phases of existence in nature. First, the physical controlled by the dissipation of energy

according to the three laws of motion, energy taking the line of the least resistance, determined by the contending energies, resulting in an order that is produced through maximum waste; secondly, the mental, controlled by the dissipation of energy according to the laws of mind, energy taking the line of the least resistance determined by the intellect, resulting in an order that ends in relative waste; thirdly, the social, controlled by the dissipation of energy according to the laws of morality, energy taking the line of the least resistance as determined by the moral and social senses, resulting in an order that produces perfect economy in the energies of nature and the energies of society. In each system of organization there is an increasing economy of energy, and a new set of laws, producing a new form of order, higher than that which went before it. In physical, inorganic nature the waste of energy is at its maximum. The dissipation of energy is purely blind, aimless. In the organic world energy is made to follow the line of the least resistance according to mind. What energy is saved is saved for purely selfish purposes. In society in its ultimate form, energy is dissipated with perfect economy, made to follow the line of the least resistance according to intelligence and morality, and the energy saved is saved for the whole of society, altruistic purposes.

It is not my intention to give a full detailed account of nature from the point of view of the three mechanical laws of motion, the dissipation of energy along the line of the least resistance as determined by the contending energies, for when the reader gets the general conception of the triplicate formations of the systems of order in nature, with their different laws of expending energy, he will not need it; but it is my intention to give a somewhat detailed account of nature from the point of view of life and mind; and it is my special intention to discuss fully so far as I am able the expenditure of energy in society according to the laws of morality.

But I will first address myself to the discussion of the fundamental laws controlling the origination of the various compounds in nature, chemical compounds, plants and animals and human society, being the laws of repetition.

Before going any farther, in order that the reader may fully understand this investigation, it will be necessary for him to have some knowledge of the law of natural selection, so an attempted definition may not be amiss. In the theory of evolution, the selective operation of external conditions on chemical compounds, plants, animals and social forms whereby variations that are advantageous in a certain environment in the struggle for existence become perpetuated in nature, the species or the race is natural selection. It is the survival of certain favored forms, organs, organisms or institutions in the struggle for existence in nature and society. All forms, inorganic, organic and social, are constantly varying; the environment through the struggle for existence selects those fittest to exist. This process is called the law of natural selection. See Darwin's *Origin of Species*, Chaps. III. and IV.; *Descent of Man*, pp. 47 to 64 inclusive; Prof. E. D. Cope's *Origin of the Fittest*, p. 14, et seq.; Spencer's *Biology*, Vol. I., Part III, Chaps. II. and XII.

CHAPTER II

THE LAW OF REPETITION

I

The most universal phenomenon in nature is change. Everything is in a constant flux, a continuing process. Whether it be a nebulous mass forming a solar system in the depths of space or the crystallization of a salt in the retort in our hands, we note the same common fact of progressive change. Out of this seeming chaos, upon investigation, comes the truth that no matter what it is that changes its process is but a repetition of similar processes throughout the universe, and different only because under different conditions.

The gravitant energies constituting matter the universe over simply repeat the forms in which they act, and would go on repeating them forever without change but for external radiant energy, the physical energies of nature, making modifications in them. And the radiant energies in nature in their translatory motions in nature simply repeat themselves in whatever object they come in contact with. The action of gravitant energy constituting bodies is internal repetition. The action of radiant energies in repeating themselves in bodies is external repetition. Throughout space we find nebulous masses at various stages of development in the production of solar systems. One system is a repetition of another except for slightly different external conditions due primarily to difference in size and to external physical conditions. In the solar system each planet produced by the sun is a repetition of the sun on a smaller scale except for

slightly different conditions due primarily to difference in size and to external physical energies. In the moons thrown off from the planets, we find a repetition of the planets on a smaller scale, due primarily to difference in size and to different external conditions. The phenomena of nature according to internal energies would be an exact reproduction of each other except for external physical energies which vary the repetition by modifying the conditions of the repeating bodies. Matter the universe over is passing through a cycle, a universal process, and these various cycles are exact reproductions of one another except for the size of the masses undergoing the change and the different external physical energies.

No doubt solar systems begin, go through definite evolutions, and end, just as everything about us begins, goes through definite evolutions and ends, ourselves not excepted; and solar systems no doubt repeat over and over again their phenomena, although it may take billions of years, just as the gravitant and radiant energies here on earth repeat over and over again their phenomena, some in a day, a year or a century. If man could live on the earth for several hundred million years the great cycles of the solar systems could be observed; as it is, such knowledge is only possible to the race as a whole. But what man lacks in direct power of observation, he makes up in reason and inference, and all of the phenomena of the universe will some day be read as a book from the key of his knowledge of the immediate environment surrounding him.

On earth it will be found that all of the different elements repeat themselves in identical forms with identical properties, and are only varied slightly under different external energies, the elements taking different forms as gases, liquids, solids and crystals, depending upon external energies. The same is true of all chemical compounds. They always repeat themselves in identical forms and are varied

only under different conditions. The two manifestations of energy in chemical compounds are chemism and external physical energies. Nature everywhere is passing through a cycle from the vast solar system to our own lives—one analogous of the other.

The difference between organic compounds and inorganic compounds is not so profound as heretofore believed. Man's theory of things has dominated his perception of the facts. Starting out with the belief in an impassible chasm between the organic and the inorganic, man has not been troubled in finding facts to justify his belief. But nature looked at from the naturalistic point of view demonstrates its perfect continuity. For every characteristic of the organic, there is a corresponding characteristic of the inorganic, no matter the intricacy of the phenomenon, reproduction, life, mind and social aggregation. Take, for example, the phenomenon of reproduction. The great difference between organic and inorganic reproduction is that inorganic reproduction is always by abiogenesis, spontaneous generation, and takes place whenever the constituents of an inorganic substance are present under the proper conditions. It would be really more descriptive of the phenomenon, however, to say that elements and inorganic compounds *produce* themselves instead of *reproduce* themselves; yet even in inorganic compounds we see the incipient form of that reproduction which in organic compounds is called sexual reproduction. A crystal of a substance placed in a mother lye will instantly produce crystalization, which, without it, might have been delayed for hours. Reproduction in chemical compounds is more similar to reproduction in tribes and nations than in plants and animals. Among societies, the parent nation throws off colonies that are a repetition of the mother state only varied under different conditions, the different conditions being different ideas often suggested by new physical conditions.

II

In organic compounds is the first place in the evolution of the solar system that we see repetition in a perfect form, and there the offspring is an exact repetition of the parent except for the variations due to external energies. It makes no difference whether the organic product be a plant or an animal, it is always the same. The possible variations due to external conditions are much greater in organic compounds than in physical, inorganic compounds, but the law of external repetition holds sway just the same in both worlds. The internal energy in plants and animals acts in metabolism, assimilation and decomposition, and ends in heredity. The external energies forming the conditions of existence of plants and animals are the physical energies of nature, and their effect upon plants and animals ends in variation. Repetition in the inorganic world is the origination of any element or chemical compound, it taking a definite form as a gas, a liquid, a solid, a crystal, determined by external physical energies.

The law of internal repetition, whether the repetition be a chemical compound, a plant, an animal or a nation, repeats the form of the body in which it acts as nearly as possible, and would repeat it perfectly if a perfect adjustment of radiant and gravitant energies of nature could be effected; if the relation existing between external and internal energies were constant and invariable. Only for external energies, there could be no variation in the repetition of bodies, let them be chemical compounds, plants, animals or nations; and only for internal energies, there could be no permanency of form, no heredity in chemical compounds, plants, animals and nations. The internal energies in tribes and nations, consisting of feelings and emotions, the primal emotion being religion, end in order, permanency of form; and the external energies, consisting of ideas, knowledge end in variation of form, progress.

The law of internal repetition is best seen in organic compounds. There generation after generation the individual is repeated almost without variation. The law of internal repetition is that the internal energies repeat the body in which they act, subject only to the changes introduced by external energies, let the body be a chemical compound, a plant, an animal or a nation. But the action of the internal energies do not compass the whole of any phenomenon, because surrounding any and every object are external physical energies that form its conditions, and upon which its existence depends. If we begin with the primal chaos of the solar system, it is effected by the radiant energies of the surrounding universe, repeating themselves in it by the law of external repetition, bringing it to their condition. As the solar system begins to form, the external energies repeat themselves in the planets, bringing them to a condition similar to themselves. On the face of the earth, we see how rapidly the external energies, heat, for example, permeates every substance, by the law of external repetition, reducing it to its temperature by repeating in the substance its own vibrations. Among plants and animals the external energies repeat themselves in the organisms, and in this way adapt the organisms to the environment. It is by the law of external repetition that mind is developed, and by the same law that society has been evolved. The law of repetition establishes beyond doubt the continuity of nature.

Nature works by simple means but takes infinite time in which to perform its functions. The law of external repetition is a very simple thing, so simple as seen in the inorganic world, that it does not look to be the efficient cause of the wonderful adaptability of plants, animals and nations to their environment, which we see in nature and civilization to-day, but such we will find to be the case upon investigation. And the law of internal repetition, equally simple, none the

less will be deemed a mystery, when we trace it through chemical compounds, plants, animals and nations.

The spectrum analysis shows that all identical substances, not only here on earth, but in the heavenly bodies throughout the visible universe, are identical in composition. The law of definite proportions in chemistry shows that all identical chemical compounds are the same in composition. Whenever a substance is produced, it is but a repetition of all other substances of like kind. Wherever a chemical compound is reproduced, it is a repetition of all identical compounds, but owing to external energies being different there are some slight variations. In plants the variations are still greater, in animals still greater than in plants, and the widest variation in the repetition of compounds is met with among nations, a variation in which the change introduced by external energies in the form of new ideas is so great that after a few centuries the parent nation can scarcely be seen at all in the child-colony.

III

The law of repetition is thus seen throughout all nature, beginning with the least developed of all organizations, the universe, and ending with the most highly developed organism, society.

The following is an example of the law of internal repetition among animals, from the works of Prof. John Tyndall:

“Yonder butterfly has a spot of orange on its wing; and if we look at a drawing made a century ago of one of its ancestors, we probably find the self-same spot upon its wing. For a century the molecules have described their cycles. Butterflies have been begotten, have been born, have died; still we find the molecular architecture unchanged. Who or what determined this persistency of this recurrence? We do not know; but we stand within our intellectual range when we say that there is probably nothing in that wing which

may not yet find its Newton to prove that the principles involved in its construction are qualitatively the same as those brought into play in the formation of the solar system.”—*Fragments of Science*.

The following is an example of the law of external repetition among animals from the works of Prof. E. D. Cope:

“By the discovery of the paleontologic successions of modifications of the articulations of the vertebrate, and especially the mammalian skeleton, I first furnished an actual demonstration of the reality of the Lamarckian factor of use, or motion, as friction, impact and strain as an efficient cause of evolution.”—*Primary Factors of Evolution* pp. 10, 11.

The following is an example of the law of internal repetition as applied to social organizations from Prof. J. Luys:

“The history of ancient literature shows us that in the same situations human beings have always felt and acted in an identical manner. In every page of their tragic or comic works, we find that common fund of immortal truth and judicious reflection, which will be eternally current and applicable at every epoch. Similarly, if we consider humanity throughout space, we find that the civilized nations of the extreme East, the Chinese and Japanese, have of themselves in their own social evolution automatically invented the same processes of government and administration which have been for centuries contemporaneous in our old Europe.

“Human brains, therefore, everywhere and always react in a common and identical manner in the presence of the external excitation. We thus arrive at the opinion that there is in humanity a sort of general arrangement of ideas and sentiments, by virtue of which all men automatically take the same direction in the same definite circumstances and judge of surrounding things in an identical manner. It is the natural aptitude that we all possess of vibrating in unison

with others in the presence of an external situation, for refracting external impressions in a fashion identical with that of our fellows, that causes us to have within us that notion of right according to which our judgments and actions should be unconsciously directed. There is then a common right line, a regular highroad which is, in a measure, the common meridian line along which the emotions, judgments and actions of human beings are directed; and it is this inner notion that we carry with us, which constitutes the rule of good sense and *common sense*.

"The complete man regularly constituted, should, then, in the presence of fixed determinate emotional situations, react in an appropriate manner, make the same reflections, experience the same attractions, and the same repulsions that his fellows experience. This is the happy point of contact which unites all humanity in the same joys and the same sorrows, associates it, under whatever latitude and whatever epoch we consider it in the same enthusiasms, the same sympathies, and the same aversions."—*The Brain and its Functions*, pp. 185, 186.

The law of repetition has been recognized by various authors, most prominently by M. Tarde of France, under the laws of imitation; and also by Prof. J. Mark Baldwin of the United States, under the same title. It is perfectly natural that such a law should be discovered by more than one mind, for such is the history of the discovery of all of the many ways of expending energy in nature. It is an example of the law of external repetition itself being the same energies in society repeating themselves in similar minds, and resulting in similar discoveries. But the law of repetition as elaborated in this book was originated by the author in 1895 long before he had heard of Tarde's or Baldwin's work.

The similarity of the flora and fauna of the Old World and the New World is explained by the law of repetition—

external conditions being similar, climate and geography, the environment, the forms of life are similar.

IV

Thus we see that the law controlling the combination and organization of all matter from the solar system to the social organization, and the law controlling the registration and the expenditure of the physical energies from the transmission of the physical energies of inorganic nature to the development of the human intellect in organic nature, and the development of morality in society, is the one law of repetition. As there are two manifestations of energy,—gravitant energy producing compounds by its atomic motions; and radiant energy being the conditions of the compounds and determining the combinations and organizations,—corresponding with these two kinds of energy, there are two forms of repetition: internal repetition and external repetition.

Internal repetition is the repetition of the energies constituting matter. It results in static phenomena. In physical, inorganic compounds it is chemism. In organic compounds it is metabolism and results in the phenomenon of heredity. In society it is conservatism and results in the phenomenon of order.

External repetition in physical, inorganic nature is the repetition of the physical energies, light, heat, mechanical energy and so forth. It results in dynamic phenomena. In organic compounds the repetition of the physical energies of nature results in variation. In society external energies consisting of human energies, feelings and desires, produce the phenomenon of progress.

Internal repetition in general results in static phenomena, in the combinations and organizations of matter seen throughout the universe; external energy in general results in dynamic phenomena, changes in matter and in movement. In

internal repetition the energies, the atomic motions and units, repeat the forms in which they act, subject to the changes caused in them by the external energies, let the forms be chemical compounds, organic compounds or social organizations. In external repetition, the energies, heat, light, mechanical energy in physical inorganic nature, feeling and will in society, repeat themselves in the various forms of organic matter or social organizations, thus modifying and adapting them to their various environments, let them be animals, men or societies. Only for internal repetition, there could be no permanency of forms, no organizations of matter; and only for external repetition, there could be no variation in these forms to correspond to the changes in the environment. These two laws of the expenditure of gravitant and radiant energies in nature working in harmony, cause all the evolution we see in inorganic nature, in organic nature, and order and progress in society, and are sufficient to explain the causation of every phenomenon.

Further illustrations of the laws of repetition are not necessary at this stage of our investigation, if I have given the reader a general idea of the law, for this entire work is but an application of the laws of repetition to the phenomena of nature, life, mind and society.

CHAPTER III

THE ORIGIN OF LIFE

I

The solar system is a process which began with the least possible combination of matter, and the maximum amount of external energy; and, in completing its cycle, in adjusting its gravitant energies to its radiant energies—really what the universal process consists of—it will end with the greatest possible combination of matter, and the minimum amount of external energy. After reaching the highest organization of matter, the socialization of the entire human race, owing to a constantly diminishing amount of external energy, it will ultimately result in the destruction of all of the organizations of matter in the solar system, and the universal process will begin again from the ensuing mist of atoms, passing to the original confines of the primal nebulous mass, resulting in a consequent generation of external energy. During the universal process occur the various organizations of matter here on earth, chemical compounds, plants, animals and humanity, and which resist the ultimate disorganization of matter by resisting the dissipation of external energy into space. The earth is now somewhere at an indeterminate stage of this universal process, just at the beginning of the human race's conscious existence, which, no doubt, will last for many million years before we see any indications of the end.

At its beginning, the physical energies of the earth were so intense that the only forms of matter possible were gases, but with the adjustment of radiant and gravitant energies, a new combination of matter took place and liquids were

formed; with a further adjustment of radiant and gravitant energies, solids were generated, and from solids came amorphous, crystalline and cellular compounds. Just as when temperature falls below freezing, ice forms, so when the temperature of our primordial world fell below a certain point, owing to the adjustment of radiant and gravitant energies, the universal process, liquids formed; then amorphous, crystalline, and cellular compounds were produced.*

At the dawn of life and mind, the earth was vastly different from what it is to-day. Its solid crust was thinner; its atmosphere was denser, and composed of many gases now locked within compounds. Its oceans were wider and richer in all the organic constituents. The physical energies of the solar system were more intense than they are to-day. The storm-tossed ocean and the wind-blown land commingled their elements and energies in mechanical and chemical actions now unknown to our quiet earth. As a result, the ocean was the retort in which life was formed, and the land became the laboratory of its development. Butschili, Hofmeister, Quincke and others have shown how artificial protoplasm may be made from the emulsions of soaps and oils; and in some such way the original protoplasm was formed by the mechanical and chemical actions of primitive nature.†

Whether the production of protoplasm is still going on or

* "It is not to be doubted that in the early history of our Earth organisms must have been produced abiogenetically; the origin of living things must of necessity have sprung from inorganic matter."—WILLIAM WUNDT. Quoted in BUCHNER'S *Force and Matter*.

† "Biological researches in the last few years have added vastly to our knowledge of protoplasm and its properties and there is no longer any question that its qualities are the expression of the various movements, chemical and physical, and belong to it simply as a chemical substance. Chemists have synthetically formed out of the various elements a vast number of substances that were not long ago believed to be formed only by living things, and there is but little reason to doubt that, when they shall be able to form the substance protoplasm, it will possess all the properties it is known to have, including what we call life, and one is not to be surprised at its announcement any day."—PROF. A. E. DOLEBEAR, *Matter, Ether and Motion*, pp. 282-3

not, we are incompetent to discover with our imperfect senses. It may be possible that it is, for the combinations of matter that take place in the recesses of the ocean are unknown to us, and the chemical combinations and the biological organizations that take place in the atmosphere are beyond our powers of observation. The probabilities are that as nature always expends its energies along the lines of least resistance, and as it would seem to be more economic for nature to reproduce organism from organism than out of their inorganic constituents, abiogenesis, spontaneous generation, is a method of originating life, which in the struggle for existence in originating life among compounds, has ceased to take place, by being replaced by the methods of reproduction.

II

At each change in the diminution of the earth's energy there has resulted a corresponding change in the forms of matter on the earth. The difference between a chemical compound and a living compound is the difference external energies have upon each of them, the difference being partly caused by the external energies themselves. There does not seem to be anything mysterious happening when a vibrating body causes another in its field to vibrate; or that pressure, electricity and heat are communicated from one body to another; or that light can reflect the image of an object; yet the law of external repetition by which these phenomena occur is the same law by which life and mind are produced.

Life, defined by Herbert Spencer as "Continuous adjustment of internal relations to external relations," fits the phenomenon when it is highly developed, but not so well at its commencement. Primordial external energies, light, pressure, heat and so forth, repeating themselves in the primordial internal energies, chemism, resulted in elements and chemical compounds being produced here on earth. Then followed the origination of higher chemical compounds

as objects for external energies to work upon in their interminable adjustment and readjustment, which constitutes the cycle of the solar system, the universal process, from primal mist to completely opaque bodies at absolute zero, when the process will have ended. External energies existed and acted from the origin of the solar system as they do to-day, but compounds to act upon here upon earth did not exist until some compound arose out of the primal mist, through the action of external energies upon the internal energies constituting matter itself, which could perpetuate itself by taking advantage of external energies being repeated in it, causing them to adapt it to its environment.

Every compound in nature is affected by the condition of every other compound—the conditions being external energies—but is most powerfully affected by those in close proximity to it. Whenever, in the history of the world, there arose a compound which could perpetuate its existence through this common property of matter—its ability to be affected by the conditions of surrounding matter—that compound possessed the incipient form of what we call life and mind. Pressure, vibrations of light, heat and electricity and sound existed and repeated themselves in compounds by the law of external repetition, for ages before any compound arose, through the repetition of internal energies, that could utilize the external physical energies to perpetuate its existence; and when some such primordial compound did arise, the first life and mind began.

Life and mind are phenomena that are inseparable, that are present in all nature in the form of primordial energies: gravitant energies constituting matter; and radiant energies constituting the conditions of matter. When the earth reached that stage in its evolution at which it was possible for the inorganic to be supplemented by the origination of the organic, compounds formed of atoms, not being able to perpetuate their existence by being influenced by the conditions of surrounding compounds, were easily destroyed; while

compounds that were capable of being affected by the condition of surrounding compounds perpetuated their existence. This is the first manifestation of the law of external repetition, and consists in the energies of nature, light, heat, mechanical pressure, electricity and so forth, repeating themselves in compounds, and thereby adjusting them to nature. At this stage of the development of compounds upon the earth one of two things must have occurred. Either nature was compelled to take advantage of this agency, the law of external repetition, to supplement chemism, the law of internal repetition, or evolution must have ceased with purely chemical combinations as we see in inorganic nature to-day. Chemical energies following the law of internal repetition can develop a compound so high—if other agencies, external energies, following the law of external repetition, cannot continue the development, or assist in continuing it, it must stop. It was at this stage in the evolution of the forms of matter on the earth that the law of external repetition was utilized to supplement the law of internal repetition in developing a high compound of matter subsequently called organic.

After the earth had been formed, the oceans condensed and separated from the land, with the continuous adjustment of radiant energies to gravitant energies, the universal process, new compounds were formed by purely chemical actions, each becoming more and more delicate, as external energies became less and less intense, until finally a compound was produced by purely chemical means, which took advantage of the impressions that external energies made upon it, to perpetuate its existence. This was the first form of life. Any compound benefited by its being affected by the conditions of surrounding compounds, having external energies repeated in it by the law of external repetition, according to the law of natural selection would survive; and by the law of internal repetition (heredity), its character-

istics would be perpetuated in its offspring, let them be reproduced in any manner whatever. That such a compound in the infinite trials of nature was produced is a matter of fact; and that protoplasm is that compound is the belief of the scientific world to-day.*

Protoplasm differs in two ways from chemical compounds. First, by being constituted chemically so that external energies, in repeating themselves in it, can liberate some of its elements without destroying the compound as a whole, which it would do if it were inorganic, resulting in chemical decomposition, and a liberation of energy within the compound, which moves it as a whole out of a medium unadapted to its existence, or into a medium adapted to its existence. This is the source of all animal movement from the amoeba to man.†

Secondly, protoplasm is so constituted that external energies in repeating themselves in it, in making these discharges of internal energy, follow the line of the least resistance, and develop sense-organs, and, by storing themselves in

*"For the purpose of biological study life must be regarded as a certain property of compound matter. But we are forced to regard the properties of compounds as the resultant of their constituent elements, even though we can not well imagine how such a relation exists; as in the long run we have to fall back upon the properties of carbon, hydrogen, oxygen and so forth, for the properties of living matter."—*Introduction to General Biology*, MESSRS. W. T. SEDGWICK and E. B. WILSON, pp. 5, 6.

†"We may now briefly consider protoplasm from the dynamical or physiological point of view. We know that living things are the seat of active changes, which taken together constitute life. * * * Whence comes the power of protoplasmic action? The answer to this question can be given at this point only in very general terms. It is certain that protoplasm works by means of chemical action taking place in its own substance and it is further certain that these actions are, broadly speaking, processes of oxidation or combustion; for in the long run all forms of protoplasmic action involve the taking up of oxygen and the liberation of carbon dioxide. Energy is therefore set free in living, active protoplasm somewhat as it is in the combustion of fuel, like the coal is gradually used up, disintegrates, and wastes away, giving off as waste matter the various chemical products of combustion, and liberating energy as heat and mechanical work. The loss of substance, however, is continually made good (much as coal is replenished) by the absorption of new substance in the form of food, which may consist of active protoplasm, derived from other living bodies, or of substances convertible into it."—*Ibid.*, pp. 26, 32, 33.

the organism, by the law of external repetition, in the course of countless ages, develop the human body and the human mind, and through them human society.*

When looked at from a naturalistic point of view, life is easily explained; but when confused with our allegorical, theological conception of things, inherited from the past, it is a profound mystery transcending the powers of the human mind. And if we could for the nonce be done with the primitive, anthropomorphic way of looking at things, we would have easy sailing in philosophy; but alas! the very words with which we express our ideas are full of implications of these earlier theories of things, and often a naturalistic expression of a thought is absolutely impossible.

It will be seen that in giving an explanation of life, I have always associated it with mind. This was unavoidable. Life and mind are inseparable. They are different aspects of one and the same phenomena, the organization of matter: life primarily is the action of the internal energies constituting matter, mind the action of the external energies constituting its conditions. Or it may be that the phenomenon of life is better defined as the interaction of the internal energies constituting matter with the external energies constituting the conditions of matter. In this chapter we have considered the organization of matter from the point of view of life; in the two following chapters the aspect of mind will be treated.

* "The more highly specialized forms of protoplasm are effected by a great variety of physical agents, such as light, sound, pressure and so forth and upon this susceptibility depends many of the higher manifestations of life. For instance waves of light or sound acting upon special protoplasmic structures in the eye and in the ear, call forth actions which ultimately result in the sensations of sight and hearing. Similar considerations apply to the sense of smell, taste and touch; but the discussion of these special modes of protoplasmic action must be deferred. Enough has been said to show that living organisms (that is, the protoplasm which is their central part) are able to respond to many influences proceeding from the world in which they live. Upon this property depends the ultimate relation between the organism and its environment, and the power of adaptability to the environment which is one of the most marvelous and characteristic properties of living things."—*Ibid.*, pp. 39, 40.

CHAPTER IV

THE PHYSICS OF THE SENSES AND THE INTELLECT

I.

The continuity of nature is a doctrine of so recent a date that despite our belief in the law of evolution, we still look for the explanation of things in their perfected forms instead of their incipient manifestations. When we once arrive at the conclusion that mind is a product of nature, and not a mysterious metaphysical entity suddenly transplanted to earth by some occult power, we seriously begin tracing it back from man through the lower animals, until finally we reach the ultimate energies of nature, and see in them the incipient manifestation of life and mind. Mind is a product of the senses, and the senses are a result of the energies of nature. It takes no great acumen to trace the evolution of mind to-day; but it does take considerable moral courage to think and speak counter to the greater part of the human race and the example of history on so vital a problem.*

A sense is a result of the way a physical, external energy, light, heat, pressure and so forth, registers itself in an animal organism; and after countless ages of development ends in a highly developed sense-organ to receive such external energy. The registrations are the residua of the impacting external, physical energies; and it is through them that the

* "We find that there is a manifest power of perception in most natural bodies, and a kind of appetite to choose what is agreeable and to avoid what is disagreeable to them. * * * No one body placed near to another can change that other body or be changed by it unless a reciprocal perception precedes the operation. A body always perceives the passage by which it insinuates; feels the impulse of another body, where it yields thereto; perceives the removal of any body that withheld it, and thereupon recovers itself; perceives the separation of its constituents and for a time resists it; in fine, perception is diffused through all nature."—*Advancement of Learning*, Bk. IV, Ch. iii. FRANCIS BACON.

animal cognizes and classifies similar external energies, such registrations in the course of countless ages developing into the mind. The function of the registrations is to discharge, and furnish avenues of escape to, the internal energies of an organism liberated by them, and thus adjust the organism through its motor apparatus to the environment. The residua increase in number—each residuum, impression, sensation, perception, or idea, or whatever you may call it, being a path of escape to the internal energies of the organism, due to partial chemical decomposition, oxidation—and after countless ages of development and organization, from amœba to man, end in the phenomenon we call intellect. The function of the intellect is to direct the ensuing action of the organism, due to external stimuli. It varies the law of action and reaction, the law of expending energy along the line of the least resistance, determined by the contending energies, by making each reaction of an organism not controlled by present stimulus alone, as in inorganic bodies, but controlled by ideas, being expenditure of energy through the accumulated experiences of the organism, from the registration of all the stimuli it has inherited from its ancestors, and has experienced in its own life, and all of the combinations it has been able to form from them.

In order that the senses and the intellect may perform their functions, animal organisms have developed an elaborate motor apparatus and a complex nervous system, both, however, in perfect accord with mechanical laws. In the beginning there was no differentiation of tissues in animals and even in highly developed animals now the differentiation of tissues is not perfect, one tissue often performing the function of another. Prof. Jacques Loeb says:

“A study, then, of comparative physiology brings out the fact that irritability and conductivity are the only qualities essential to reflexes, and these are both common qualities of all protoplasm. The irritable structures at the surface of

the body and the arrangement of the muscles determine the character of the reflex act. The assumption that the central nervous system or the ganglion-cells are the bearers of reflex mechanism cannot hold. But have we now to conclude that nerves are superfluous and a waste? Certainly not. Their value lies in the fact that they are quicker and more sensitive conductors than undifferentiated protoplasm. Because of these qualities of the nerves an animal is better able to adapt itself to changing conditions than it possibly could if it had no nerves. Such power of adaptation is absolutely necessary for free animals."—*Physiology of the Brain*, pp. 5, 6.

Each of the senses of animals is due to a different kind of energy in nature, and if there were suddenly to appear in nature a new kind of energy which could assist animals in adjusting themselves to their environment, and the adaptation was necessary and could not be accomplished in any other way, then this new energy would originate in animals a sense to apprehend it, thus enabling them to adapt themselves to their environment through it. One sense is due to impact, one to light, one to heat, one to sound. It took ages of evolution to produce the senses of man, but through the law of external repetition we can trace their development; the eye, for example, from the eye-spot of the infusorian, through the invertebrate, the vertebrate, mammal, up to the primates, then to man, and new senses have developed as new energies were encountered and utilized in animal development.

II.

The sense of touch is due to the impact of an external body arousing residua of similar impacts registered in the tissues of an organism, which preserves the new impact and classify it as a line of least resistance or greatest attraction, the resultant of the conditioning energies, for the discharge of the liberated energies of the organism in its reaction on

the environment. For example, if I touch a pebble on my desk, it none the less touches me; but the difference is that there are registered in my nervous system an infinite number of previous experiences in touching similar objects which perceive the new experience and classify and register it; whereas in the case of the pebble, while it experiences a change in the condition of its substance at each experience of touching, yet it has not the power to register them, hence never acquires sensibility. This is true of all inanimate bodies.

The sense of touch is the disturbed condition of certain nerves in an animal organism due to a similar disturbance in the environment. Whether or not we know an object touched depends upon whether or not we have touched it or similar objects before, knowledge being residua of former touchings. The sense of touch is due to pressure and contact, and differs in animals from what we see throughout all inorganic nature only in that the animal has the power to keep records in its tissues of all of its experience with external stimuli from pressure and contact to classify and know a new stimuli. Whereas an inanimate body has not this power, being compelled by its composition to react from present stimuli alone. The real marvel in the development of a sense is not in receiving an impression, for inanimate objects do that, but in registering it and utilizing the experience in reactions on the environment.

The function of a sense is twofold. First, to receive the impact of an external energy which discharges some of the internal energies of the organism receiving it, which in turn produce an action of the organism in the environment. Secondly, the impacting energy or stimulus is an avenue or path of escape to the liberated energy of the organism, enabling it in the ensuing action, through this stimulus or some other similar one experienced before or inherited, to move into an environment that is conducive to its welfare, or out of an environment that is inimical to its welfare. Ani-

mals in the expenditure of their energies in their reactions on nature follow the idea, representation, the line of the least resistance or the greatest attraction selected from all the experiences of their lives and what they have inherited from their ancestors.

No doubt at first among primitive animals when they received impacts from external energies, the impacts set off some of the animal's energy resulting in a spasmodic motion which might or might not result in a movement that was beneficial to the organism, and which differed only from the meeting of two inorganic bodies in that the action and reaction were not equal and opposite, that the line of expenditure was determined not by the contending energies alone but by experience from former stimuli. But after ages of evolution, through the law of natural selection and the law of external repetition, the channels of expenditure furnished by external stimuli, ideas, became channels of unerring certainty as methods of expenditure, so that now when an organism of the highest kind, say man, receives an impression from the environment that is deleterious to him, he always moves away from it, taking the line of the least resistance; and one that is beneficial, he moves towards it with the least expenditure of energy possible. There is no mistake or uncertainty in the senses and the intellect in man now in directing internal energy as there was in the beginning.

III.

Sight is external light arousing registered impressions of light. The first impression registers itself, the second arouses the first and registers itself, and as the registrations increase the power of sight increases, and the wider the experience the greater the range of vision. But while the eye and the optic lobe, the seat of the registrations of experience with light, have become wonderful developments, yet it is impossible for them to see without external light to

arouse the registered impressions of the optic lobe. What occurs to us when we see an object is that many light waves of different length strike the retina and are registered in the brain tissues. This stimulus arouses a similar number of waves registered in the brain tissue which act synchronously with those out in nature. This action is seeing. There is nothing more mysterious about it than there is about a vibrating tuning-fork causing another like it to vibrate which is placed in its field. Or is it more remarkable than the telephone that transmits vibrations of the human voice over hundreds of miles of wire charged with electricity? Or more wonderful than the graphophone which mechanically reproduces the vibrations of the human voice after having been mechanically stored? A mirror reflects the image of an object. A photographic plate registers it. A sense impression from light is an analogous phenomenon. The surprise in the explanation of the senses comes from the simplicity of the explanation; but he who studies nature closely knows its processes of necessity are simple and that it accomplishes its wonders by simple means acting through æons of time.

The first time the human eye has light reflected into it, it sees nothing. What we see depends upon our experience and the experience of our ancestors, from the infusorian with its eye-spot, the first reaction of protoplasm to light through successive changes in protoplasm caused by light's having been registered in the animal organism ages after ages; and such registrations are perpetuated in successive generations of animals through the law of internal repetition until finally, through inherited structure and incessant experience, we have the human eye evolved with all of its wonders and possibilities.

IV.

Hearing is produced by external energy in the form of sound waves of enormous length compared with those of

light, which, on striking the auditory lobe, arouse residua of similar waves, producing the sensation of sound. The greater the variety of the wave lengths registered the finer the distinction of sound. The ear is one of the last senses to be developed in the animal creation simply because the first forms of animal life are incapable of taking advantage of sound waves to perpetuate their existence. Whether or not the lower forms of life can hear matters little to them; but to the higher forms it is of incalculable benefit, and the sense of hearing is very acute and highly developed. To distinguish musical sounds the ear is one of man's most wonderful faculties.

The temperature sense is the residua of impressions of heat registered in an organism through the law of repetition, which receives and classifies similar impressions and furnishes avenues for expending energies from this class of external stimuli.

The muscular sense is the residual impressions of pressure registered in an organism through the law of external repetition which receives similar impressions and performs its functions similar to the other senses.

If there were other external energies in nature which could forerun the hurtful or point out the beneficial, we would have senses produced by them. There may be many unknown forms of energy, but they are unknown to us because they are neutral to our existence.

V.

Scientists do not admit that the internal vibrations registered in the nervous system of animals are identical with the external vibrations in the environment causing them; yet they must be identical or else we would have unlike knowing like for the first time in all nature. Nor do they attempt to explain how vibrations in the environment can cause ideas that are invariably aroused by them and yet are

not composed of identical vibrations. George J. Romenes in his lecture, "Body and Mind," says: "A sensory nerve which at the surface of its expansion is able to respond differently to difference of musical pitch, of temperature and even of color is probably able to vibrate very much more rapidly. . . . We are not entitled indeed to conclude that the nerves of special sense vibrate in actual unison, or synchronize, with their external sources of stimulation, but we are, I think, bound to conclude that they must vibrate in some numerical proportion to them (else we should not perceive objective differences in sound, in temperature and in color). . . . There is a constant ratio between the amount of agitation produced in a sensory nerve and the intensity of the corresponding sensation."

Just as we know through the spectrum analysis the constitution of astronomical bodies, because the vibrations of light of given substances in them are identical with the vibrations of light of the same kind of substances here on earth, so do we know that the registered energies in organisms are identical with those in nature, and the time will come when instruments will be invented which will demonstrate that these residual registrations of the energies of nature—ideas—are identical with the physical energies causing them.

In an hypnotized person, when an image is projected from the mind of the subject into nature, the phenomena follow the same laws of physics as if the image came from external nature into the eye, thence to the mind. Féré suggested to a patient that on a dark table there was a portrait in profile. When she awoke she distinctly saw the portrait where she had been told to see it, and when a prism was placed before her eye, she was highly surprised to see two profiles. *Moll Hypnotism*, pp. 280-1. Is this not a proof that the energies constituting an idea are identical with the energies producing it, that is, in this case, light? Had there been a real

portrait on the table the prism before the eye would have made it appear double. In the example the only energy was the energy constituting the idea, and as the prism caused the phenomenon of doubleness we are justified in concluding that the energies constituting the idea are the stored energies of light.

Only like can know like. Just as a vibrating tuning-fork causes all other tuning-forks in its field that are like it to vibrate in unison with it, so do all external energies cause their residual representations in the nervous tissues of animals to vibrate in unison with them, such a synchronism being knowledge itself. If the mind is not the residual representations of external energies identical with it, stored in the animal organism through the course of æons, then, indeed, it is inexplicable. If mind grew up in nature as all science teaches that it did, what else could have produced it? If this explanation of mind is not true, then, indeed, not only is the universe inexplicable and unknowable, but also the phenomena of our own little world; for there is no such a thing as natural knowledge, science is but a dream, and man the sorry dupe of his own nature. But happily such is not the case. Despite our preconceived notions, despite our personal interests and individual preferences, despite ignorance and error, the truth as here given is destined to be the common property of the whole race in the immediate future. This is the glorious hope that sustains scientific investigators in their arduous labors.

When we are born we have neither senses nor intellect, but the constant action of external energies upon our inherited sense and brain structures soon develops the senses, and within a few years the intellect. If a child is deprived of experience with the environment, it never develops either senses or intellect. Now this would not be the case if the mind were a metaphysical entity, as it is supposed to be. There would be no occasion for its development; for it is

naturally perfect. But if the mind in nature is a natural product, then it stands to reason it would have to pass through a process of evolution and development. With the slow development of mind in our children before our eyes every day, with the memory of our own development constantly before us, it is passing strange that the origination and development of the senses and the intellect is not seen to be due to external physical energies; but such is certainly not the case. It seems more difficult to see the patent than the deliquescent facts of nature—life, mind and society.

VI.

In the case of the four intellectual senses, the recorded impression—idea—is the avenue through which the internal energies of the organism, due to partial chemical decomposition, is discharged, resulting in a movement of the organism as a whole, beginning in aimless reflex action and ending in reason, the rigid adjustment of means to ends. At first the energy in the environment set up an action in the organism that was aimless. It differed from a reaction of an inanimate object in that only a part of the internal energies of the compound is discharged. It is properly called reflex. By the law of natural selection and the law of repetition a second form of reflex action is developed. The internal energies of the organism are still discharged through the avenue of the one experience but not aimlessly, the external energy setting up in the organism an action identical with itself, causing a movement of the organism as a whole away from energies that are hurtful and towards energies that are beneficial. The energies in external nature are the conditions of matter, and many of them forerun the bodies of which they are the properties, so that external energies give warning of danger or herald the approach of safety. But for this property of living matter, its ability to perceive external nature at a distance, it could

not exist at all, and its power of doing so has grown from the incipient manifestation seen in inanimate objects, when they vibrate to external vibrations, up to its perfection in man who can predict events for years and years to come.

The power of an organism to act from concepts, instead of from present stimuli, in its most developed form as seen displayed in man, is called intellect. In the inorganic world action and reaction are always equal and opposite, energy expends itself along the line of the least resistance determined solely by the contending energies; but with the origination of mind a fourth law of motion is developed which gives the reaction of an impression on an organism an option on all its lines of reaction, instincts, ideas, concepts, originated in its own life or inherited from its ancestors to determine its action in every stimulation. This process of selecting ideas, lines for the expenditure of internal energy, is reasoning, or thought. Sometimes it is very elaborate, taking years to come to a conclusion; other times it is almost instantaneous. A fine mind discovers new ways of expending its energies, originates new ideas. Thinking is nothing more than the energies liberated by a present stimulus under the guidance of the ego, seeking the line of the least resistance in their reaction or discharge, going over all of the ideas or concepts recorded in the brain of the animal and selecting the idea or concept that expends energies most economically; or in common parlance, adapting means to ends. Sometimes, as in the actions of men, hundreds of ideas are used in one action, the reaction being so complicated. Again, as in reflex action, the present stimulus alone furnishes the avenue for the expenditure of the internal energies, the reaction is so simple and must be performed so quickly.

Mind has grown up unconsciously. It acts now automatically. There is very little deliberate thinking. A stimulus is presented to the mind through a sense organ

which arouses internal energies that must be expended in actions. Now some idea must guide the expenditure of the energy. If the action is made at once, perhaps the best idea, the one capable of expending the energy with the greatest economy, will not be selected, then we say we have made a mistake, for afterwards we discover a more economical way of expending our energies. To say that thinking is selecting ideas for the expenditure of energies, and that an idea is an avenue for the expenditure of energies in an animal organism, may be a new way of expressing the facts, but the more one thinks about it the more the truth of the explanation dawns upon one. It is a naturalistic explanation of the mind and is destined to conquer the philosophical world.

VII.

In nature, among inorganic compounds, the line of the least resistance is always followed, for in that case there can be no possible chance for variation of effects, because the reaction of inorganic compounds have only one line of expenditure open to them—the present impact or stimulus. Intellect or mind consists of registered impressions, concepts, mental pictures, which are possible avenues of expending liberated energy of organisms in reactions due to external stimuli, causing movements of the organism and controlling the movement from present stimuli. In the course of time these pictures of nature, vibrated into the brain tissues, through the senses, following the law of repetition and the law of natural selection, become a miniature nature, a mirror of real nature, so that the highest organization of matter—man—may have within himself a knowledge of all nature, which is both beneficial and hurtful to him, to be used by him as a guide in his movements in real nature; and thus overcome the law of action and reaction, the law that all energy in nature takes the line of the least resistance determined by the contending energies, the reaction in this

case being determined by mind, ideas, concepts, instead of the present external stimuli.

The mind is the representation of the energies of external nature, a miniature nature registered in an organism which enables it to rise above the chain of cause and effect of present stimuli by introducing the chain of cause and effect of the past, inherited from all of its ancestors and experienced in its entire life, making all of this experience a possible factor in every action, thus enabling its possessor to know, modify and improve real nature—its prototype—by following the fourth law of motion, the fourth law of the expenditure of energy in nature, that is, of using in every reaction all the recorded methods of the expenditure of energy of the race, its ideas and knowledge, as well as of its own life, in order that it may expend its energy along the line of the least possible resistance and the greatest possible economy. By the sameness of the external energies in nature and their residual representations in the brain, the laws of nature become the laws of mind, and the conditions of nature may be modified through the mind to human advantage. For individuality, consisting of the will and the intellect, really constitute the whole of nature; the will being the highest manifestation of the energies constituting matter, the intellect being the highest manifestations of the energies constituting the conditions of matter. The individual, thus in addition to being a perfect representation of external nature, is nature itself, being the highest compound of nature yet produced through the law of internal repetition by the internal energies constituting matter.

In the developed form of modern man the individual has become so powerful through his representations of external energies—his intellect—that he is not only able to use his own energies to the greatest possible advantage to himself, but is able to turn nearly all of the energies of nature to his own especial use and advantage. This is the reason the

human species is the conqueror of the earth. All other compounds and organisms of nature are but parts of nature, but man, through his mind (will and intellect), is a part of nature (will) plus a perfect representation of nature (intellect), thus nature (the matter and energies constituting the universe) registers in a part of nature (man) a representation of the whole of nature (the intellect), thereby enabling the part (man) to control and use the original whole of nature, through that return of nature upon itself, caused by the law of repetition, which we call knowing and consciousness. Knowing is the registered impressions of external energies receiving and classifying a new impression of the same energies. To classify is to know, and to name is to classify. Inanimate objects know, but their knowledge is confined to one experience. When one vibrating object sets another to vibrating the process is incipient knowledge. The nervous system is but a delicate organization that vibrates in unison with all the energies of nature, such vibration being man's knowledge of nature. Nature is but one vast system of vibrations, and the intellect is but residual impressions of it, synchronously adjusted to it by the law of external repetition, and preserved and developed by countless ages of experience through the law of internal repetition—heredity.

Self-consciousness is registered impressions of ourself, the energies constituting matter composing our bodies, classifying a new impression of ourself. Just as the external energies of nature registering themselves in specialized tissues of our organism formed the senses and the brain, so the internal energies of our organism registered themselves in the same specialized tissues of our organism, and we call these registered impressions our personality, our ego; and now when an external energy makes an impression on our organism it affects the ego, for the ego is the seat of the energies constituting our organism.

Intellect is thus found to be a natural phenomenon devel-

oped from the property of matter which communicates its conditions to surrounding matter. Animate matter differs from inanimate matter simply in being able to register these conditions through the law of internal repetition and the law of natural selection, which, during countless ages, has developed the intellect of man as we see it to-day.

CHAPTER V

THE CHEMISTRY OF THE SENSES, THE EMOTIONS AND THE WILL

I.

Now, while external energies, following the law of external repetition, are repeating, registering and classifying themselves in animal organisms, creating the senses and thus developing the intellect, the internal energies of animal organisms, following the law of internal repetition, are undergoing a corresponding development, which, beginning in chemism, develop the senses of taste and smell and end in developing the will and all the desires, the hopes and fears, love, religion, humanity—all the emotions of the human heart. The senses of taste and smell are due to chemical energies of matter following the line of the least resistance or greatest attraction through the tissues of the organism in which they act as it is influenced by surrounding objects. Their function is to build up the body, not the intellect; and, through their highest product (the emotions) they effect all the other wonderful organizations of matter (tribes, nations) and will ultimately effect the perfect socialization of the entire human race.

The senses of taste and smell accept and take into the body substances with which they come in contact compatible with the body in which they act and constitute, and avoid every object incompatible. The internal energies in the form of emotions, possessed alike by all individuals, form tribes, nations and races; those individuals being killed or expelled which do not feel and believe with the commonality. And ultimately the socialization of the entire human race

will be effected after our great conflict of contending emotions and beliefs ends in the truth, by the entire race being bound together in one common emotion—religion based on morality. Thus we see that the chemical energies are capable of as wide a differentiation and development as are the external energies, being the basis of all human energy, both individual and social. They furnish the motor power of the organism. It is to chemical energy that all animal movement is due and the profound evolutionary movement of the social organism is no exception.

Beginning in the simple process of building up the animal body in the form of the senses of taste and smell, the internal energies then make the further organization of matter of joining the sexes together in the emotion of love; and this is followed by making the greatest organization of matter possible in the emotion of religion, binding the tribe, the nation, and ultimately the whole race, together in one organism. The possibilities of the internal energies beginning in chemistry are thus seen to be as great as the possibilities of external energies beginning in light, heat and so forth, and ending in the intellect and self-consciousness of the individual, and ultimately in the conscious existence of the entire race.

There is thus a radical difference in the origin and function of the senses of animals. The senses of taste and smell are chemical senses; the senses of sight, hearing and touch are physical senses. The first form of the senses of taste and smell is the atomic and molecular affinity of matter attracting matter with which it can combine, and repelling matter with which it is incapable of effecting combination. And this characteristic is seen throughout all of the higher manifestations of internal energies—in love, and likewise in religion, as we will demonstrate later on. The chemical senses have for their function the building up of the body of an organism in which they act; they bind it together, in its higher manifestations they unify it. The function of the physical

senses (sight, touch and so forth) is to keep the animal organism free from injury and to guide it into benefits; and this is its function in all of its higher manifestation, in the form of intellect and social consciousness. The chemical senses might be called static, the physical sense dynamic, and this distinction is seen in all of the higher manifestations of each of them. Whatever is pleasant to the taste is usually capable of being assimilated by the organism, and whatever is not is incapable of assimilation. A person compelled to live upon a disagreeable food soon learns to like it, then craves it when it has once become a part of his body. Appetite for a substance is little more than certain kinds of substances in the body which produce a painful sensation when not constantly replaced by similar substances in the environment. It is the function of smell and taste to find suitable foods in the environment with which to replenish the body in the exhaustion of its tissues in its many actions, individual and social. But for the senses of taste and smell to guide an animal in finding its necessary food it would soon die; and but for the higher manifestations of the internal energies in the form of love and religion, there could be no perpetuation of life, and no ultimate social organization compassing the whole race.

Experiences from the senses of taste and smell registered in animals develop into will, desire, love, religion and all of the emotions of the human heart. Each of these manifestations of the primal internal energies of matter has the primal function of binding the object in which it acts into an organism, let it be inorganic matter, an animal, man or human society. The language of love is that of taste. The greatest compliment a lover can pay the object of his affection is to call her sweet. The function of love is that of reproduction, and sexual reproduction is only a differentiation from the phenomenon of nutrition. The copulative act among Amœbæ ends in the union of the conjugating

bodies. It is a form of eating. And even among the highest animals the ovum may be said to devour the spermatozoon. Love is true to its differentiation. Even in man it uses actions and words indicative of its primitive origin in its kisses, embraces and endearing terms.

And the language of religion is that of love. It is difficult to tell in the Bible in some of the rhapsodies of the prophets whether their language is addressed to God or to some beautiful human being. It is useless to give quotations. And the manifestations of religion as seen in the numerous monasteries expresses itself in terms of adoration to deity like the rhapsodies of a frenzied lover. And the best conception of God yet originated defines Him as Love, and of all the means of arousing religion none surpass the belief in one God binding the race together in one family, one brotherhood. And the highest form of religion (the religion of morality) simply demonstrates the unity of the human race, the brotherhood of man, the continuity and unity of all nature (matter, life, mind, society) and makes religion due to service to humanity, building up the race, unifying it; and the language of this religion, too, is that of love.

Desire and will are closely associated with man's assimilative nature. They are differentiations of hunger and want, to the building up and the tearing down of the animal organism or its perpetuation. The senses of taste and smell are not intellectual. We do not think in their terms. We express our emotions in their terms. The senses of sight, touch, hearing, while produced by physical energies, end in the intellect, and may be called either intellectual or physical senses. We think in terms of sight. We see a proposition. Taste and smell are blind. Will, desire, love, religion—all the emotions are blind. They are but developed forms of the blind internal, chemical energies of nature. In the course of our investigation we shall find that will, desire, love, religion are unconscious, and, if not guided by

the intellect and knowledge, are perfectly irrational. Intellect, with its highest development (the social sense), is the eye of the will, desire, love, religion, the heart, or sensibility of an organism such as man. Intellect in its highest manifestations sees the way that will is directed, desire sated, love gratified, religion obeyed. And as taste and smell are for the primary function of nutrition, so are desire, will and love for the function of reproduction, and religion for the function of protection, perpetuation and perfection of the tribe, the nation, and in time the entire human race. Reproduction is but a differentiation of nutrition, and religion does for the social organism what love does for the animal organism.

The senses of taste and smell are the means whereby the body accumulates its energies. The senses of sight, touch and so forth produce the intellect, and it is through the intellect that the body expends its energies. Ideas are so many paths through which human energy can flow; the energy being will, desire, love, fear, religion. But for the intellect man's body would be subject to the law of action and reaction, and would be as incapable of using the energies of nature as a clod. But for the senses of smell and taste animals would soon become extinct, being unable to find suitable materials with which to replenish their wasting bodies. But for desire, love, will, animals would soon become extinct, because they would have no incentive to reproduce and perpetuate their kind. Only for religion humanity would become extinct, for it would not have any emotion broad enough to bind the race together in a single organization. The senses of taste and smell finally end in the emotions; the senses of touch, sight, and so forth, finally end in the intellect and the social sense. It is the function of the intellect in the individual to control the emotions and furnish an avenue for their expenditure so that they will best conserve the being possessing them.

The social emotions will be treated more fully in a subsequent part of this work and the remarks here made on love and religion are made only to show the scope of the theory propounded.

II.

The union of the two forms of sense perceptions produce the phenomenon of self-consciousness. The physical senses being in connection with the internal energies are thus connected with one another, they using the nervous system as a means of communication. The union of the external energies, and their product (the intellect), and the internal energies and their product (the will and the emotions), gives rise to the most remarkable phenomenon in nature, the ego or self-consciousness. What is the ego? In its first form the ego is what an animal feels to be its life. It is the sensation of life in our body. In its final form it is the internal energies of protoplasm in their developed form of life, consisting of the will and the emotions, cognized by the internal energies of nature in their residual, stored form of intellect. The chemism of matter is the basis of the ego. Out of it is developed the will and the emotions. Just as external energies repeating themselves in an organism give rise to a body of sensation which we call a sense, so the energies of one's life constantly repeating themselves in his body give rise to a body of sensations which we call self. Man is a compound animal and it is through the ego that his differentiated parts are unified, the ego being the basis of the organization. A person says: "My intellect," that is, self's intellect, the internal energy's intellect; because the sense registrations or intellect is dependent upon, registered in, grown upon the will or self. Everything belongs to one's will or self, one's internal energies; for they are the beginning of every form of matter. Self-consciousness is the impression that one's internal energies, constantly performing the functions of life, make upon one's nervous system

and the rest of his body; such impressions after repeating and registering themselves finally become capable of cognizing a new impression as a sense impression is cognized by any of the senses. Consciousness in general is the receiving and cognizing of any impression, and when the registered impressions of the internal energies, that are being constantly liberated in performing the usual functions of life, cognize a new impression of themselves, or when a new impression of them arouses the registered impressions, then we have the phenomenon of self-consciousness or the ego. This is why it is that while we are only one person, yet are competent to watch ourselves, being in the same mental phenomenon the object and the subject. The registered impressions in the form of the ego watch the internal energies making some new impression, and the new impression is as much ourselves as is our ego, and we recognize it as such, although heretofore not being able to explain the phenomenon.

When one is self-conscious there are two aspects to the feeling, part of it is located in the nervous system, registered impressions of self and part within the body, the energies constituting life, making a new impression on our registered impressions of self. Self-consciousness is nothing more than registered impressions of one's own vitality receiving another impression of one's vitality. So one may be conscious of being conscious; the internal energies constituting self making a new impression on the registered internal energies constituting the ego. All knowing comes from like impressions receiving like impressions. All consciousness comes from impressions arousing similar impressions, consciousness being the harmony or synchronism existing among them.*

III.

The answer to all this is, that it is materialism. Well

*"Physiology thus appears as a branch of applied physics, its problems being a reduction of vital phenomena to general physical laws, and thus ultimately to the fundamental laws of mechanics."—*William Wundt*.

what of it? Does it help matters any to designate systems of thought by opprobrious names? The question is, is the foregoing explanation of life and mind true or approximately true, or is it even a working hypothesis? Does it help one to formulate a better conception of nature, life, mind and society, so that one may more effectively live, develop his nature to its fullest capacity, to help perfect society so that it may realize its true function of perfecting the individual? Let the sequel answer.

Prof. A. E. Dolbear says: "As no one has been able to see how vital and physical phenomena are correlated, men have been loth to believe it to be a fact—a mental position which assumes before a relation can be logically accepted it must be explained, which is not true. The relation between mechanical energy and electrical energy is very definitely known, yet it has not been explained; but in this question there is no personal equation, no such lively interest in its settlement as in the other. The one has only mechanical interests, the other is so much a sociological question as to threaten war involving church and state. Dr. Burnard, a former president of Columbia College, said concerning a debatable question in science, that if it were true, he did not want to know it, and that is the way a large number of persons feel about this question of life and its relation to ordinary matter."—*Biological Lectures, 1894, Marine Biological Laboratory*, p. 5.

Most of our investigations of nature are made with the intention of establishing preconceived notions and theories of things in which we have financial or social interests; instead of being unbiased expositions of the facts, they are adroitly presented arguments to uphold our beliefs. It is the function of the philosopher to give the efficient reasons

* "The unfruitfulness of brain investigation is due, however, only partially to the difficulty of the matter. The main cause seems to be the entire absence of any working hypothesis, or even an approximate idea, as to the nature of cerebral activity."—*History of Materialism*, Vol. III, p. 112, by F. A. LANGE.

and causes of all phenomena based on facts, no matter how unpleasant they are, if true. Any one who has not the courage and honesty to follow where the facts lead is unworthy the name of philosopher, and any one who fears to follow the facts is a moral coward and deserves his fate of superstition and ignorance. No man is a man but the thinker, and no man can think except in an atmosphere of freedom and bases his thought on the solid rock of reality. The hero is not he who conquers on the field of battle, nor he who leads men to political victories, nor one who is a captain of industry; but he who accepts the intellect and knowledge bequeathed to him by the race, searches deep for the fundamental nature of things and finds it, and has the courage to publish his work to the world, and never ceases trying to apply his thought to the human situation so that in time the race may be perfectly adjusted to its environment, and the universal process of adjusting radiant, external energy to gravitant, internal energy be accomplished in the highest organization of matter possible, the human race as a social organism, and the greatest possible economy of energy thereby be attained.

CHAPTER VI

ANIMAL MECHANICS

I.

In the mechanics of living organisms it will be seen that action and reaction are not equal and opposite, but that an external energy may set up in a living body motions vastly different from itself, and the energy of the body is not dissipated blindly, determined only by the contending energies, but along the line of the least resistance, conserving the life of the living body or its species determined by ideas, and not all at once, but just the amount the animal sees fit to use, determined by the ideas and concepts of the individual and the species. The animal organism stores the energies of nature to be used and dissipated as needed. The line of expenditure is not that of the least resistance of one experience (present stimuli), but a line established by the coalescing of the lines of all the experience, ideas, concepts, that the animal has had in its life or inherited from its ancestors. The internal energy is not dissipated blindly by external energies, but the residua of various external energies are registered in the organism and act as lines of the least resistance for the expenditure of energy for the animal or its species. The mechanism for the expenditure of an animal's energy is the nervous system organized with its muscular system. Owing to the fact that the living body can receive impressions from external energies and store them in its body to be used as channels for expending its internal energies to its own and its species' advantage, in a sense it can originate actions. Living organisms are not beaten pell-mell about in nature, but dodge in and out amongst the

interacting bodies and ultimately direct the energies of external nature to their own advantage. From their small beginning in protoplasm, through countless ages of time and infinite number of forms, the body and mind of man have been developed.

The incipient motions initiated in protoplasmic compounds by the action of some external stimulus upon it is the beginning of the organization of the mechanical powers, the lever, the balance, the wheel and axle, the pulley, the inclined plane, the screw and the wedge, so highly organized in the body of man, making him, through the development of the nervous, muscular and osseous systems, capable of actions outside the domain of the three laws of motion and putting him under the control of a higher mechanical law, that of action controlled by ideas and morality. We can trace back in the history of creation the mechanical development of all of the tissues of the animal organism, and can see that the action and interaction of external energies upon living compounds resulted in developing all of the mechanical powers constituting the utility and beauty of the human organism.

II.

The skeleton of animals is due to pressure in living, moving animal tissue. In the beginning, before any animal had developed any skeleton or bony framework whatever, some animal, worm-shaped, by forcing itself to perform linear movements, after infinite trials, developed vertebræ by the pressure of its body due to external resistance. In the case of insects, the pressure being different, the bony skeleton is different. The same is true of other forms of animal life. After infinite trials nature has developed some five types of life, and this no doubt exhausts the possibilities of animal tissue under mechanical pressure here on earth. If there were other types they failed to adapt themselves to the environment in the struggle for existence and became extinct.

It is not planned that all of the higher animals shall have backbones, but it is due to mechanical pressure in living organisms that made certain persistent motions in moving from place to place in response to certain external stimuli.*

The rest of the skeleton of animals developed from mechanical necessity—the pseudo-leg being produced by parts of tissue compelled by external pressure to perform the functions of a leg, the pseudo-leg begetting the true leg through the laws of repetition and the laws of natural selection. We can trace animals back to where the ankle joint was so imperfect that it could scarcely be called one at all, and then trace its development up to its perfection in man, and know that the evolution has been due to mechanical pressure acting under the laws of natural selection and the laws of repetition.†

In the case of some kind of animals the upper extremities coming in contact with the atmosphere, instead of the solid earth, developed into wings, not only in one kind of animal, but in many, as insects, reptiles, birds, mammals. In other kind of animals the same extremities, in their habitual resistance, meeting with water, developed into fins, as in fish and mammals. The mechanical pressure being different, the organ is different. In some cases, as in whales and certain snakes, extremities in the form of legs, after they once

* "If we now imagine that either the integuments, or anaxial rod, of a worm-like animal has become the seat of a calcareous or chitinous deposit, it is evident that the movements of the animal in swimming or creeping must have interrupted the deposit at definite points of its length. The lateral flexure of the body would be restricted to certain points, and the intervening spaces would become the seat of the deposit. At the lines of interruption joints would be formed, and if the movements were habitually symmetrical, these interruptions would be equidistant. In this way the well-known segmentation of the external skeleton of Arthropoda, and the internal skeletons of Vertebrata would be formed."—*Primary Factors of Organic Evolution*, pp. 368-9, PROF. E. D. COPE.

† "The demonstration of the mechanical origin of a given peculiarity, however, by no means precludes that such peculiarity may not be an inheritance from or reversion to pithecoïd ancestors. It has already been pointed out that all of the form characters of the vertebrate skeleton, and for that matter, of the hard parts of all animals, have been produced by muscular pressure and contractions, and the frictions, strains, and impacts due to these."—*Ibid.*, p. 467.

had been developed, were completely changed by the adoption of a new form of mechanical pressure. What an animal's form is depends upon its physical surroundings and the kind of habitual movements it makes in its daily life.

But it is not only the bony skeleton that is developed by mechanical pressure. The same is true of the circulatory system in animals. If the heart is a pump, it is because it made itself one, following the law of natural selection and the laws of repetition under mechanical pressure. The valves in the veins are not due to design, but to the mechanical necessity of liquids flowing under rhythmic pressure in closed tubes which change as the pressure is applied. The embryology of animals is the geological strata of the soft tissues of animals, and it is to its study that we need look for missing links.

Everything goes to show that animals are a product of nature due to mechanical laws. The development of the mind and the motor apparatus of animals go hand in hand—the one always being an accompaniment of the other. The same is true of the alimentary system. Man could not have his present highly developed nervous system but for his perfect alimentary and circulatory systems.

It is not capriciousness that causes every animal that lives in the water and passes rapidly through it to be serpent- or fish-shaped, or that the bottom of boats are so; but that any body passing rapidly through water is mechanically compelled to take that shape. The whale, a very fish-shaped animal, was once a quadruped, but its life in the ocean, after countless ages, changed its complete appearance and none but a scientist would take it to be a mammal. Animals do not have legs, fins and wings because walking, running and swimming are the best methods of movement, for they are not, wheeling being much better. But nature is incapable of making wheels directly for locomotion, only indirectly through man did it accomplish movement by means of the

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wheel and axle, because limited by mechanical necessity, under the three laws of motion, it is an impossibility. According to mechanical laws creeping, swimming, walking, running, flying are the only ways animals can move. If an animal meets with an obstruction in its efforts at locomotion, the opposition it meets with will react upon the animal and determine its method of movement, causing it to fly, walk, run or swim of dire physical necessity.

III.

The position of cities is determined by mechanical laws. All great cities are situated at centers of trade—the lines of the least resistance for the distribution of the products of the race. Formerly they were on rivers, owing to rivers being the line of travel, but to-day they are on railways, the easiest line of travel between two points. If the line of trade changes the cities cease to exist. The great cities of Babylon, Nineveh and Carthage are no more. It is the mechanical flow of human property that determines the location of cities, modified by the flow of human energy in the protection of property in war with other nations, where cities are built for defensive purposes. But such motives in the building of cities is becoming a thing of the dark past, and to-day there is a tendency to let fine art determine their location, as Washington City in the United States, for example.

All great nations are situated in the temperate zone from mechanical principles, because the exertions necessary to gain a living in the temperate zone result in the development of great nations. All torrid zone people are dwarfed in development, owing to nature's being too kind to them; while the people of the frigid zones are dwarfed by nature's being too cruel to them. In the temperate zone there is enough severity to stimulate great activity, and not too much to produce lassitude. The mechanical effect of climate and

soil upon peoples has been observed by historians before, but they have not seen fit to carry the facts to their logical conclusion. In all the efforts at a mechanical explanation of things heretofore philosophers have been fragmentary.

The color of the clothes we wear, the kind of food we eat, are determined by mechanical laws. In the torrid zone, and during the summer in the temperate zones, we wear white clothing, because it radiates the heat more readily. In the winter in the temperate zones and in the frigid zones we wear dark-colored clothing, because it does not radiate heat so readily. In the frigid zones fats are the chief food; in the temperate zones, meats; in the torrid zones, fruits, depending upon the quantity of animal heat necessary for one to exist. It is all due to mechanical laws. It is a matter of the expenditure of energy.

If we were wise enough we could reduce all civilization to mechanical laws and show that the desires of men can be measured and calculated upon, that instinct acts as a natural force, that human emotions are energies that follow natural laws, that reason itself is but a method of nature to save energy, that morality is but the most economical channel for the expenditure of energy yet discovered by the race.

IV.

There has resulted from the first origination of protoplasm two forms of development—physical and mental. The more varied an animal's mental development, the more varied its physical development, and *vice versa*. They always go hand in hand and both physical and mental development reach their highest perfection in man. What nature can do with different forms of life, under different conditions, is shown in the five types of life here on earth. The elements of nature, after infinite trials, first along this line, creating in one geological age a world of plants that exhausted the superabundant amount of carbon dioxide of

the primitive atmosphere—to be followed by another geological age, in which animals seem to try to reach economy in the expenditure of energy through the enormity of their size—to be followed by new departures along different lines, until finally after ages of the struggle for existence and repetition after repetition, nature struck upon the method of using the energies of nature through mind, and man was developed, seemingly to combine in his physical makeup the merit of all of the other animals with defects peculiarly his own. If one looks at the skeleton of primitive animals, one will notice that there is a gradual development of brain capacity displayed along the lines of all animal development, and most along that of human development. That everything is a result of mechanical energy is a conception the world is gradually coming to, no matter how unpleasant or how unwonted it may be. To prove the body of man a result of mechanical laws is no doubt difficult; to prove the mind a result of mechanical laws has been deemed heretofore an impossibility. To prove that our social aggregation follows mechanical laws may be done; but to prove that morality is controlled by the same laws to most persons will be deemed a shocking absurdity. But the facts are before us. All we have to do is to interpret them. We know that the animal body has been originated and with it the human mind; that our social aggregations began within historic times; that principles of morals, deemed cardinal to-day, were not dreamed of in the days of Aristotle; that all of this progress is due to the factors and energies at work in nature and society, and, with the key of present knowledge, we can readily determine them.

V.

The law of natural selection and the laws of repetition are the most potent factors in understanding nature, life, mind and society. Internal repetition as heredity always reproduces the individual animal form as nearly as possible

like the parent form, and, before sex was developed, it was almost identical with it. But the law of internal repetition has always been kept from repeating the animal form exactly by the law of external repetition, which repeats in the animal all the energies surrounding it, producing in it variations and adapting it to its environment. Internal repetition is not enough to insure the perpetuation and development of life, for the environment changes; so that form of life which, in repeating itself, allows external energies to be repeated and registered in it, to vary it, and thus, through natural selection, to adapt it to its environment, stands a greater chance of perpetuation and development than one which only repeats itself—a chemical compound, for example. This ability to adapt itself to the environment becomes the chief characteristic of living matter. The great problem of animal life has been that of adaptation and not heredity. The problem of adaptation has been solved by variation, and whatever has increased variation has always been taken advantage of by organic life in its long history.*

Variation in the evolution of life is primarily secured by death. By making life a cycle, a process, self-initiated, the elements and energies of nature originated a compound that was not dependent upon accidents of the environment for its originations, as are pure chemical compounds, but only dependent upon the environment for its existence. Death and reproduction are the primal factors in the variations of animals. It is the only way energy can be expended to enable an organism here on earth to adapt itself to a con-

* "The whole organism molecularly considered, is as fixed and immutable, within certain variable limits, as a crystal. * * * In the animal organism the molecules are mobile within limits; in the crystal they are fixed. Nevertheless, we may justly regard an organism as developing after the manner of crystals, but with the power of very gradually varying their forms by means of variation in structure, forms and powers of their constituent molecules, in the course of many generations of individuals."—*Biological Lectures, 1894, Marine Biological Laboratory*, pp. 48-9, by PROF. JOHN A. RYDER.

stantly changing environment; for immortality implies a permanently adjusted relation between organism and environment; or an environment that never changes and a permanently adjusted organism to it. Neither of these suppositions have happened here on earth, although it is the goal of social evolution to reach an adjustment with the environment that will be an exact correlation to it in all of its changes throughout eternity. It was either death and reproduction to primitive organisms or else extinction forever; and life adopted death in order that it might live and reproduce and reach the glorious development we see to-day. There was nothing mysterious about this. It is probable that originally death resulted to all the primitive organic compounds the same as to chemical compounds; but as the dead bodies of the organisms were the constituents of new organisms, it is probable that the constituents immediately entered into the new compounds, which is not death, but spontaneous generation; then followed the union of effete organisms upon the verge of death, and an incipient form of sexual reproduction was initiated; and death made only a relative phenomenon, and the permanent life of the race secured. At each reproduction of an animal the internal law of repetition repeated all the changes that the external law of repetition had registered in it, and thus the adjustment of one generation was handed on to the next, and the simple cycle of life became the grand evolution of the race.

VI.

The second variation in the evolution of life, by furnishing a greater variety of experience for variation, is secured by the division of labor introduced by plants and animals. The first great division of labor upon earth was that of plants and animals; the plant, sacrificing a wide, deep, high life for certain existence, lived upon the elements ever at hand, organizing them into compounds to be used

by animals as food; animals, performing a fortuitous but grand career, cut loose from the soil and entered upon a great life of freedom. Plants did the work that could only be done by being stationary; animals did the work that could only be done by being active. These two forms of life began supplementing each other by a division of labor in building compounds to be used by each other, the plants acting as food for animals, and animals and their products acting as food for plants. They utilized each other's peculiar nature and caused the differentiation to become wider and more pronounced; animals thereby reaching a higher, deeper and more extensive development by being relieved of the drudgery of building foods from inorganic compounds, and by having a world-wide habitat, full of varied experience with the various stimuli of nature to produce in them the thousands of variations impossible to the immobile and sessile plant; and plants, having a certain existence guaranteed them for this sacrifice, became the inferior organisms we see to-day.

The microscopic speck of protoplasm that became sessile was acted upon by mechanical energies which, through the laws of internal and external repetition, made it a plant. The microscopic speck of protoplasm which floated free in the primal ocean was acted upon by mechanical energies, which in time, through the laws of internal and external repetition and the law of natural selection, made it an animal.

Plants and animals have their respective kinds of life determined for them exclusively by mechanical laws. Plants in general have their food ever at hand without any exertion on their part. They are sessile, live a narrow, sure existence and reach only a small degree of life. In fact, plants do not live at all; they simply exist. Animals generally are compelled to hunt for their food. They must move about, and as a result, organs of locomotion are produced

and mind is developed to assist them in moving, to avoid injuries and to seek benefits. If an animal had no better means of knowing the environment than a plant, yet compelled to move about in it in order to secure its food, it would soon rush into some danger and be destroyed. It is all due to mechanical necessity of animals that they are as they are. Were animals provided with food as plants are or as animals are with air, they would cease to be animals and become plants. This is proved by parasitism. It is the precariousness of the animal situation here on earth that has made animals what they are. It is the necessary activity that animals are subjected to which has produced the wonderful animal organism, the mysterious human mind, and the marvelous thing called society or civilization. Mechanical necessity determines everything; but it is so constant that we do not notice it.

VII.

The third great division of labor, taken advantage of by life in order to increase its experience with nature, and thus become capable of greater and greater variations, is that of sex. Before the origination of sex, the animal reproduced itself subject only to whatever variation the external energies of nature produced in it. But with the origination of sex, the powers of variation of the offspring were doubled, and its power of adaptation to the environment increased twofold, because it received the experience of both of its parents. Sexual reproduction assists in a greater differentiation of organisms, and leads to wider experience, causing the organism to come under the influence of more energies, which result in greater variation of animals, which in turn, causes a more perfect adaptation to the environment. In sexless animals the offspring is almost an exact reproduction of the parent. When the original protoplasmic cell began uniting with another similar cell (a kind of nutrition), the united cells produced a greater variety in cells than those not

having united, and thus had a better opportunity for adaptation to the environment. The registered energies of the environment in each cell were somewhat different, and as it is through these registrations that variations in organisms are secured, it stands to reason that if two protoplasmic cells were to unite their resulting offspring would have the experience of both of them, hence the ability of both to vary and thus be better able to adapt themselves to the environment, and, in the struggle for existence amongst organisms, they would survive, while asexual organisms would become extinct. It is from this form of nutrition that sex began. As sexuality increased, a greater variety of animals and plants was developed, and a more perfect adaptation to the environment secured; hence sexual plants and animals were the ones that lived and perpetuated themselves, according to the law of natural selection and the laws of repetition, and a more perfect economy of energy was secured.

Self-reproduction was the most natural, but it could not secure as great a variety of experience for the offspring as sexual reproduction; hence plants and animals that reproduced sexually were able to live through the struggle for existence and the law of repetition perpetuated their merits; and the same external energy that gave rise to the variation of sex caused it to become permanent and to be one of the chief factors in the perfection of the economic dissipation of energy, which is the function of the universal process we see going on in life and society.

The division of labor of the sexes is as sharply defined as that of plants and animals; they cannot interchange functions and they supplement each other as closely and as fully. The experiences of the sexes being different the offspring gets both aspects of life (the environment), yet is able to perform but one function, nevertheless, it receives a double power of variation to adapt itself to the environment. Sex is due to mechanical laws in nature in the expenditure of

energy, securing a greater economy by a division of labor, and accomplishes the end of adapting plants and animals to their environment; the differentiation of plants and animals being a similar division of labor, a similar expenditure of energy, with a similar function. Each is determined by the environment and can be explained only upon mechanical principles.

VIII.

There is yet another division of labor in nature, that division of labor performed by the powers of order and the powers of progress. I do not mean that division of labor noted in economics, which gave origin to the term division of labor, but that division of social labor which has for its function a greater variety of experience in the social environment and a consequent greater power of evolution. It seems that social organizations are composed of two kinds of people, the conservative and the radical; those who work for order and those who work for progress. If these two kinds of social units were given names analogous to biological creations, those who work for order would be the female element of society, while those who work for progress would be the male. There is no doubt but a proper coalescing of these two kinds of social units would produce a more healthful form of society than if but one element were acting in determining the future of society. Throughout history whenever the progressive elements of nations have been suppressed, they have become extinct, incapable of adapting themselves to their environment, incapable of reproduction or perpetuation. And at all times in history whenever the progressive element became too predominant, as in the French Revolution, it produced varieties in society that could not exist, and resulted in deterioration at once. A proper coördination of these two elements of society has always resulted in a healthful social organization. But a full and complete discussion of this aspect of the me-

chanical principles of society is reserved for subsequent chapters.

Nothing but preconceived notions could have kept the acute minds of the nineteenth century from perceiving that the principles of mechanics extend, not only to animal and plant life, but also to society. Some ideas act as a dam to the further flow of thought. The intellectual life of some persons is a stagnant pond of conservatism. They sail around and around their one-idea world and make believe their little life is the universe, and their circuitous journeyings is progress to the goal of perfection. No notion has ever been so fertile in such a damming up of thought as that nature is not one continuous whole, and that natural laws do not hold good throughout nature, life, mind and society.

CHAPTER VII

REALISM AND IDEALISM

I.

Heretofore in the explanations of life and mind the investigator has involved himself in a maze of metaphysical perplexities, so that not one metaphysician in a dozen can understand another, and the common man never makes the attempt to understand any of them. Not being satisfied with naturalistic answers to their problems, metaphysicians have disdained naturalistic solutions, have sought to solve the problems of existence and mind by transcendental principles, instead of the simple facts about us. Rather than commence with life and mind in their incipient forms, they assume a perfect being and a perfect mind, and deduce the universe from them. The best way to understand anything, and the only way to understand the mind, is to seek out its factors and trace the process of its evolution up to the human mind to-day.

The nature of the relation existing between mind and matter is the question involved in the philosophy of idealism and realism. Idealism is another one of those thought damming theories of things which must be gotten rid of before a naturalistic theory of life and mind can be originated. The likeness between mind and nature does not come from nature's having been created by mind, but from mind's having been originated by nature. Arthur Schopenhauer in his great work, *The World as Will and Idea*, says: "The world is my idea." This is true, yet idealism is not the whole truth; for the world's being one's idea does not preclude other knowledge when the proposition is fully understood.

It is but half the truth. Two different manifestations of original energy constitute nature, and one is as knowable as the other. While they are both contained in the proposition, "The world is my idea," yet the author only meant to convey the idea that all we can know is ideas. In the proposition the world is my idea the word "world" and the pronoun "my" stand for the developed forms of the two primitive energies of nature, radiant energies and gravitant energies. The facts can best be understood by analysis. Nature consists of the gravitant energies of matter and the radiant energies constituting the conditions of matter. The gravitant energies in their developed form constitute my ego, "my," in the proposition given; the radiant energies in their developed forms constitute my ideas, the word "world" being one of them. The word "my" is my ego which consists of the gravitant energies of nature organized in my body. The word "world" is an idea, the idea being the external energies of light, heat, mechanical energies and so forth registered in my brain.

An idea is but a representation of some object in the world, and by numerous experiences one acquires an idea of the world as a whole; and so it is true that "the world is my idea," but it is also true that my idea of the world is only a representation of the energies constituting the conditions of external nature that are identical with my idea of it, and to know one is to know the other. The world is my idea, and my idea is identical with the energies of the world producing it. Hence to know an idea is to know the energy producing it. The truth about idealism and realism is that all we can know is ideas, yet ideas are identical with the energies producing them: hence idealism and realism are one and the same thing looked at from different points of view. Idealism begins with mind and explains nature; realism begins with nature and explains mind.

The "my" in Schopenhauer's proposition consists of the

organized energies constituting matter, which have been produced by the internal energies of matter in an organism, registering themselves in an organism, and thus becoming a kind of sense whereby another impression of the same internal energies may be received and classified. The energies constituting matter, under favorable external conditions, combine, recombine, until finally an organism is developed composed of many different kinds of organic tissues and so constituted that the energies of matter in one part of the organism can register themselves in another part. The "my" consists of the registered energies of matter in an organism cognizing a new impression of the energy of the organism, which is the original energy of matter. Man's body manifests the energy of matter; his nervous system records them. The ego is the registered impressions of the energies of matter constituting one's self, cognizing a new impression of self.

It is in this way that we know what the energies of matter consist of. The chemism of matter in us is will, desire, love, religion. It is through ideas that we know the energies of nature, the conditions of matter, and by self-consciousness we know the energies of matter itself. So the proposition of Schopenhauer only speaks half the truth: "The world is my idea", but I know what I myself am by identifying the energies constituting my ego as being identical with the gravitant energies of matter, so I know not only radiant energies and their products (ideas), but gravitant energies and their product (my ego).

The idea "world" could not exist except for the energies constituting matter, the animal organism their organized form, in which it is a residuum. The energies constituting matter and the energies constituting its conditions (internal and external energies) are contemporaneous: hence both idealism and realism are primary realities, realism being the energies of matter, idealism being the energies constituting

its conditions; for what in the inorganic world is called a condition of matter, in the organic, mental world is called an idea.

II.

The dispute between idealists and realists consists in realists denying that ideas are all we know and can know, and insisting upon the fact that the energies of ideas are identical with the energies of nature producing them. If we can know only ideas, then we cannot know them; for knowing a thing is seeing it under two forms and recognizing that it is the same thing. Because our minds consist of internal and external energies organized into sense, emotions and ideas, the idealist says that the contents of our minds is all we can know and that nature is something totally different from our knowledge of it. And this theory, with no proof whatever other than mere assertion, is believed by nearly all, owing to the fact that the traditional theory of the mind conceives the mind so transcendently that a natural explanation of it is not thought of. No supposition is more probable than that the intellect is but residua of the external energies of nature; as the emotions are but the developed form of the energies constituting matter. Whenever we discard the traditional concept of mind, what else is left?

An idea is the residuum of an external energy registered in an organism. If it is a residuum, why is it not identical with the energy producing it? And if an idea is not a residuum of an external energy producing it, what is it? If self is nothing but a developed form of chemism, and we know self-impressions, then, don't we know what chemism is? If we can identify self with chemism, and ideas with the energies producing them, then the position of idealism falls down, that is, that all we know is ideas, and that nature is something totally different from them. We know what matter is and what external energies are, because we know what emotions and ideas are. Our knowledge consists in the identity

of self, emotions with chemism, and ideas, concepts with external energies, and thus we not only know what ideas and emotions are, but identify our knowledge with the fundamental energies of nature, showing that within ourselves we know all there is to know in the realms of mind and in the realms of matter, such knowledge being the truth in the transcendentalist's belief that mind is back of everything.

This explanation of life and mind does not rob us of anything, and demonstrates the continuity of nature, and satisfies our longings for absolute knowledge. This explanation of life and mind ushers us into the heart of hearts of the riddle of the universe. We cannot know what matter and energy are in terms of some other entity; but we do know what they are in terms of our own being, and through this explanation we are enabled to know what is inscrutable to our senses on direct observation. Of the unknowns (matter, energy and mind) we show what each is in terms of the other. It would be sheer nonsense to postulate an unknowable, and attempt to show the relation of matter, energy and mind to it. To know what matter and energies are in terms of mind, and *vice versa*, is all the knowledge there is on this ultimate problem.

The return of nature upon itself, which constitutes our being, enables us to see what nature is in the infinitely small and the infinitely large by knowing what we ourselves are as we are. The human mind has ever been haunted with the belief that there is a purpose in nature. Our allegorical method of conceiving things, inherited from primitive man, when unable to understand them by sheer intellectuality, has led us to believe that there is to be a falling of the scales from our eyes, and a seeing of things face to face at some future time. This is what is accomplished in the explanation of matter and energy that they are but the primal energies of the will and the intellect, and to know will and intellect is to know the energies of matter and the energies

constituting the conditions of matter, and the seeming purpose in things is the universal process, which, beginning with matter and energy in passing through its cycle, always ends in life, mind and society in every planet of the starry heavens as here on earth.

III.

Prof. F. A. Lang, in his *History of Materialism*, Vol. III, p. 224, makes a strong statement of idealism in the following language: "The eye, with which we believe we see, is itself only a product of our ideas; and when we find that our visual images are produced by the structure of the eye, we must never forget that the eye, too, with its arrangements, the optic nerve with the brain and all the structures which we may yet discover there as causes of thought, are only ideas, which indeed form a self-coherent world, yet a world which points to something beyond itself."

This, too, is the truth, but not the whole truth. An idea of the eye is simply the residua of the external energy of light, or the residua of the mechanical energy of pressure, if communicated by contact, touch; but we have additional means of knowing what the eye is by our consciousness of it as a part of our organism.

In the human organism the energies constituting matter affect the nervous system of the organism as external energies affect it; and as knowledge of the environment consists of residua of external energies cognizing a new impression of energy, so the knowledge of self, which is a developed form of the energies of matter, consists of residual impressions of self cognizing a new impression of the internal energies constituting self. It is thus we know matter by knowing that the energies constituting ourselves and the energies constituting matter are identical. So we have a knowledge of the eye itself by registered impressions of itself receiving a new impression of itself. And as the residual energies are identical with the energies producing them, hence the

residua of external energies constituting ideas know external energies; and the residua of the energies of matter (self) being identical with the energies of matter, know the energies of matter, hence we not only know ideas, but also the energies producing them; and we not only know the energies constituting matter, because we know ourselves, but also the energies of matter through ourselves; or to know the one set of energies in each case is to know the other, for the energies of self are identical with the energies of matter; and the energies of ideas are identical with the energies of external nature producing them. So by interpreting nature in terms of mind, and mind in terms of nature, we know both mind and nature by showing that the energies constituting the one are identical with the energies constituting the other. And this knowledge is as true of our idea of our eye, or our self-consciousness of it, as of any idea or any other self-consciousness.

While all we can know of our eye through our senses is an idea of it, yet we know an energy producing an impression is identical with the impression itself; it is simply a repetition of itself; that the impression that our eye makes upon our self-consciousness is identical with itself; and it is through these registered impressions of the eye that a new impression is cognized, hence through these impressions we know the eye other than through the physical senses. If we had no eye, we certainly could never know the eye except by idea and inference, it being matter and in general like it; but having an eye, we know it by the impressions it itself makes upon our self-consciousness, such impressions being identical with the eye itself; hence we have immediate knowledge of the eye as of self or any part of the body.

IV.

As an idea is identical with the energy producing it, so is our idea of ourself identical with the energy producing

it, which is identical with the energy of matter; and by knowing the energies constituting matter, and the energies constituting the conditions of matter, we not only know mind, but also matter. We know external energies because they are identical with our ideas; and we know matter because we are matter; our ego being nothing but an evolved form of the energies constituting all matter. We know energies (the world) because they leave residua of themselves in us, which become a part of us, identical with themselves whereby we can know them.

This explanation of idealism and realism clears up the mystery of existence, and satisfies the quest for knowledge of things in themselves. What are the energies of matter, chemism? The answer is, they are identical with the energies constituting ourselves—the will and the emotions. This is an interpretation of matter in the only other terms which we can know. What are external energies, light, heat and so forth? The answer is, they are identical with our ideas of them. This explanation of external energies reduces them to the only other terms that we can possibly understand. It is absurd to think that matter and energy can be reduced to some occult form of energy. A natural explanation is all that can be given of anything. The explanation here given simply reduces the phenomena of life and mind to the terms of the internal energies of matter and the external energies constituting its conditions. The human mind to-day, for the first time, during the universal process here on earth, is competent to understand the ultimate nature of matter and energy; and to understand the universal process of the infinite universe to be a process or cycle, beginning with the expenditure of energy along the line of the least resistance determined by the contending energies, resulting in the maximum waste of energy as seen in inorganic nature everywhere; and, after infinite ages of the adjustment of radiant and gravitant energies, ending in the

expenditure of energy along the line of the least resistance determined by morality, resulting in perfect economy of energy, the minimum amount of waste, directing all the energy of nature, the individual and society, to the perfection of the individual, and thereby the perfection of society, and reaching the *summum bonum* of existence here on earth.

While the mind is limited strictly to the function it is to perform that of adapting animals to their environment, men to society; yet the greatest possible development of the human race can only be accomplished by the race realizing conscious existence, and this can be attained only by the mind comprehending what the universal process is, and the part humanity is to play in it; hence the sheer intellectual necessity of man's knowing what he is, what he is here for, what matter and energy are, and what is the destiny of things.

It is thus absolutely necessary that the race have a naturalistic concept of matter, energy, life, mind, and society before it can ever hope to reduce the phenomena of society to a scientific basis, and realize a perfect expenditure of all energy and know what our adumbrations of the universal process really are. Mind must be based on facts instead of metaphysical dreams. The continuity of nature is the fundamental truth of all our reasoning. Sociology cannot be a science until the movements of society are reducible to mechanical principles and laws to the certainty of prediction. This philosophy robs life of nothing, as our foolish fears make us imagine it does; but instead destroys that bane of human existence—uncertainty. How many provisions do we make against the unforeseen!—that is about all life is now. But when society is based on the mechanical laws of the expenditure of energy, and everything is explained from a naturalistic point of view, it will insure the individual against the precariousness of human existence, and life will be really

worth the living. Every idea will be traced to the external energies of nature producing it; every emotion to the internal energies of matter producing it. Man's unity and kinship with nature will be demonstrated. For the first time in all history we now know what we really are, what nature is, and the explanation is so simple the wonder is we never saw it before.

Nature is one continuous whole. It consists of all the matter and energies of the universe. There are no breaks, no gaps, no chasms, no missing-links—although men in their classifications of the phenomena of nature have mistaken their own distinctions for the differences of nature. To understand the complex phenomena one must study the simple. Mind comes last, not first. The knowledge gained from studying the simplest forms is carried forward to interpret the complex, and this is carried forward to interpret the compound. The only way to understand humanity is to shed upon it all the light that can be gained from the study of all nature, as well as the human race itself. Nature is an entirety. Only in this light can we know anything, and in this light we can know everything.

CHAPTER VIII

NATURALISM VERSUS SUPERNATURALISM

I.

The universal process of the adjustment and readjustment of the gravitant and radiant energies of the universe and the solar system causes a continual changing of the factors of nature, by combination and recombination, until finally there is produced here on earth a compound or organism that is independent in the sense that it has within itself the determining factors of all of its actions in expending its energies in the most economic manner possible from its own point of view. This is the individual. Not man as we see him to-day, for man to-day owes infinitely more to social organization for his development than to nature; but man before he became *homo sapiens*, primitive man uninfluenced by social development.

Individuals as independent units, another nature, because not controlled solely by the three laws of motion, but in addition the law of action from stimuli controlled by ideas and concepts—by action and reaction upon themselves, by adjustment and readjustment of themselves, by combination and recombination of themselves, formed themselves into an organization, which, when it becomes independent, and reaches perfection, will coördinate all the individuals into an organization that will be perfectly autonomous, and will expend its energies with the greatest economy possible in all nature. This is the social organization.

The theory here indicated is the naturalistic concept of things. The theological and popular concept is purely anthropomorphic and supernatural.

II.

The two phenomena in nature that seem to justify anthropomorphism and supernaturalism are the phenomena of order and design. In all of his effects upon nature, and in all of his effects upon his fellow men, man secures order only by external impressment, for in society order consists in the expenditure of energy according to the most powerful form of expending energy, ideals, knowledge, institutions, laws and morality; so that naturally man thinks the order he sees in nature is secured by some supernatural power independent of nature—its Author and Maker. Order in society is from the outside. Society enforces order upon the individual, but order in nature is inherent. In physical, inorganic nature energy is expended along the lines of the least resistance determined by the contending energies, and always ends in order, just as inevitably as society enforces order by determining the way individuals shall expend their energies along the lines of the least resistance according to laws and morality, and ends in the order of society as we see it to-day. But to primitive man the theory of anthropomorphism was perfectly natural, for the primitive mind can understand facts only allegorically. We know to-day that the permanent condition of things in inorganic nature is that of order, and, let the order of nature be disturbed, as it constantly is, owing to the universal process of the adjustment of the radiant and gravitant energies constituting nature, and a new adjustment at once takes place and a new order is secured. Just as the figures in a kaleidoscope whenever disturbed take on a new and symmetrical shape, so the objects of nature, no matter how often disturbed, always immediately assume a new form of order, instituted by the contending energies, expending themselves along the lines of the least resistance inevitably and always.

The same is true in the affairs of men. If one *régime* is destroyed, another is immediately inaugurated. Human

energy must be expended according to some kind of ideals, laws, institutions, morality, and if the forms in vogue cease to be powerful enough to accommodate the energy, then the opposing and new forms of expenditure take their place, possibly to go back to the old forms, or vacillate, as in the history of the French nation since the great Revolution, or in the United States since the Revolution of 1776. The same tendency to revert to old forms of order, after some new form has been discovered, is seen throughout history, yet there is a gradual progress in human institutions securing greater and greater economy of expenditure of energy and a better and better system of order.

While all this is true, yet man cannot free his mind from the belief that order in nature is imposed from the outside by its Author and Maker as society imposes it on the individual, and that it is not inherent in things. Man thinks that order must be preserved in nature as it is preserved in society, preserving order simply consisting in having the individual expend his energies along the lines found most conducive to the welfare of the race. Revolution is nothing but changing such expenditure along other lines better able to accommodate the energy in a more economic manner; evolution being a change to better lines of expenditure gradually by growth, development.

The order secured by the individual is also different from the order in inorganic nature. Life is a moving equilibrium within an organism. Energies in their expenditure in animal organisms take the line of the least resistance determined by ideas, instincts, instead of the line of the least resistance determined by the contending energies themselves, as in inorganic nature. And again, inorganic nature is a moving equilibrium of objects of nature, but the cycle as a process is performed by the system as a whole, not the objects constituting it. The movements corresponding to life is without the objects instead of within as in the animal organism.

The arrangements of the parts in inorganic compounds from solar system to molecular compounds are fixed. The parts do not form a moving equilibrium. The order in inorganic nature is static.

The equilibrium of life is secured by an adjustment of the contending forces of external and internal energies, the powers of heredity and the powers of variation. The energies of the animal organism in their expenditure along the lines of the least resistance are determined by ideas, instincts, not the blind battling of energies that we see in inorganic nature. When the equilibrium of an organism stops, it is said to die and its body sinks to the order of inorganic nature, but usually before dying a natural death the animal organism reproduces itself, a phenomenon not unknown to inorganic nature, it being adumbrated in certain chemical phenomena. Besides, in organic compounds the parts are equilibrated as well as the whole and perform independent movements. The animal organism is a moving equilibrium. The order in organic compounds is dynamic.

Society, too, is a moving equilibrium of forces—an organization secured by the adjustment of the contending forces of order and progress, conservatism and radicalism, statics and dynamics of the social organization. The energies of the social organism in their expenditure along the line of the least resistance are determined by laws, institutions, morality, and the economy secured is the greatest seen in nature, and when society ceases to govern or for the time being is departed from, overturned, the resulting life is that of the horde, the mob. The order secured in society is the highest known to nature. It is doubly dynamic—dynamic in its units, the individuals, and dynamic as a social organism, being controlled by social consciousness.

Thus it is seen that there are three forms of order in nature. First, order in the inorganic, which is secured by the expenditure of energy along the line of the least resist-

ance determined by the contending energies; second, order as in the organic (man), in which energies are expended along the line of the least resistance determined by ideas of the individual; and third, order as seen in society in which energies are expended along the line of the least resistance determined by laws, institutions, morality. Each form of order is an improvement upon the other in that the economy of energy is greater, and the organization is more perfect. The universal process tends to a final adjustment in which the order will be perfect, and the energies of nature, the individual and society will be expended with the greatest economy possible. This will be the perfect society, the ultimate destiny of intelligent beings here on earth as well as on every other planet throughout the entire universe.

Thus it makes no difference where we look in nature, we find that order is nature's first law and is inherent in matter and energies themselves. But philosophers are loath to give up supernatural explanations of nature, life, mind and society, and accept as true materialistic or naturalistic concepts until every objection against the new philosophy is overcome. But by that time, as in the acceptance of the law of natural selection, enough thinkers will have accepted the theory so that the explanation of minor details will be unnecessary.

III.

There are certain stock arguments forever being used as a proof of the supernatural origin of things, for example, design, despite the fact that Emanuel Kant, in his *Critique of Pure Reason*, has shown the impossibility of logically proving the existence of God in any way. It is certainly not a waste of time then to examine the design argument in favor of supernaturalism, because it is always conclusive to undeveloped minds.

Do not misunderstand me. The concept of a supernatural God, creating and governing the universe for His own

glory, making man in His own image, giving him immortal life, is the greatest theory of things ever conceived by the human imagination, except the concept that all nature is one universal process, that nature is self-sufficing, and that what seems to be design in nature is a result of the forces now at work in nature and society. No matter how beautiful the concept of a supernatural God is, if untrue it should not be taught; for nothing but the truth can perfectly adapt man to nature and society. I define the truth as being an exact registration of the energies of the environment in the individual, which makes mind a perfect reproduction of the environment, so that the mind is a perfect counterpart of nature, and with the moral and social senses acts as a perfect guide in the expenditure of human energy in nature and society. The truth is the exact likeness of the internal registrations in an organism to the external stimuli in the environment, so that the individual can know what is outside himself by consulting his own mind.

The adaptation of an organism to its environment is said to indicate design, but the adjustment of individuals to the social organization is said to be due, not to design, but to the freedom of the will of the individual; for the social organization to-day is so manifestly imperfect that it would be folly to say its present condition is due to an all-wise, supernatural God instead of the natural action and reaction of individuals in their opposition to one another, beginning with primal man in tribes, then confederations, nations and society to-day, as we see it in western civilization.

The eye is said to be designed for light. It is not.* The eye is a repetition of all of the eyes that have ever been in

* "Nothing was produced in the body to the end that we might use it; but that which has been produced, being found serviceable for certain ends, begets use. Neither was the faculty of seeing in existence before the light of the eyes was made, nor that of speaking with words before the tongue was formed; but rather the origin of the tongue long preceded speech, and the ears were made long before any sound was heard; and in fine all the members as I think existed before there was any use of them discovered. They could not, therefore, have

the history of some given individual, beginning, for example, with the eye-spot of some infusorian, the first reaction of protoplasm to light, and ending in the eye of the given individual, each eye in each successive organism being modified to some extent by the action of external light, the modification being inherited, thus adapting the eye more and more to light, until finally by the repetition of billions of organisms, with their inherited modifications, the human eye is produced with all of its perfections. What is true of the eye is true of every organ, of the organism as a whole, and it is equally true of the ideals, the knowledge, laws and institutions of society.

IV

There is no difference in kind between the adaptation of man to his environment and the adaptation of an inorganic chemical compound to its environment; only, by registering his conditions in his body and nervous system, man carries with him not only his present conditions for adaptative purposes to nature and society, but also the inherited experience of all of his ancestors in the form of mind and the moral and social senses, so that he can not only adjust himself through present experience but also through the past experience of the entire race whence he sprang. This adjusting apparatus is the nervous system, consisting of the senses, the intellect, character, the moral and social senses, and laws, institutions and morality.

What looks like design in nature is that view of an object, or organism, which excludes its ontogeny, its phylogeny and the reasons and causes of its being. Well might a savage think a locomotive the work of a supernatural God; for he does not know its history and is too feeble-minded and igno-

been produced for the sake of being used."—LUCRETIVS' *The Nature of Things*, Bohn's translation, p. 177.

This quotation shows us that we are to-day taking up the theory of things taught by Epicurus and Democritus after thousands of years of aberrations due to oriental dreams.

rant to understand its philosophy. This is the condition of the common person to-day in regard to objects in nature and man in society. From his infancy up the common man has been taught the erroneous supernatural explanation of things. Ignorant of their real history, unacquainted with their philosophy, no wonder the common man sees anything else but design in nature and society; yet nothing is truer than that the organization of nature and society is due to the adjustment and readjustment of things of their own accord during countless ages of actions and reactions in nature and society, following the laws of repetition and the law of natural selection. If there is any design it is inherent in the elements and energies of nature and not imposed upon them by some extraneous supernatural power, and consists in the simple law of nature that all energy, gravitant and radiant, expends itself along the line of the least resistance.

There is no more free will intrinsically in the actions and reactions of individuals than in any other objects in nature, except that the individual being able to act from intellect is able to expend his energies along other lines than the line of expending energy of the one experience of inorganic nature. So social man of to-day, being able to expend his energies along the lines of morality and sociality, is still more free than the primitive individual acting from intellect alone. But no matter the improvement made upon the primitive method of the expenditure of energy, yet the primal law, that all energy expends itself along the line of the least resistance, holds good everywhere and at all times.

The individual primarily is an independent organism with the function of controlling the energies of nature; secondarily, he is a unit in the social organization, being the center of human energy, who, in the absence of any control, from the point of view of society, expends his energies as wastefully as does nature its energies before the development of the individual; and just as the natural action and reac-

tion of the energies of primal nature result in the production of the intellect of the individual with the function of controlling the energies of nature, so does the natural action and reaction of individuals in society result in the production of the moral and social senses with the function of controlling the energy of individuals. The design we see in nature is due to the adjustment of the energies of nature, under the blind expenditure of energy along the line of the least resistance determined by the contending energies, which results here on earth in chemical compounds. The design we see in the animal organism is due to the adjustment of the organism to the energies of nature, after infinite essays, controlled by the laws of repetition and the law of natural selection, ending in the development of mind and the control of natural energies by ideas. The design we see in society is due to the countless ages of action and reaction of individuals upon individuals, adjustment and readjustment, conflict of tribe with tribe, repetition of favorable changes initiated by the environment, further modified by external repetitions, preserved by internal repetitions, everything gained being always preserved by repetition and natural selection, until finally modern man and modern society are produced, in which ultimately all energy will be expended by the highest form of the law of the expenditure of energy known to man: morality—which is realized in the expenditure of human energy with perfect economy. No wonder modern man, born into a civilization so wonderful, thinks it supernatural until he finds, from the study of its history, its crude beginnings, its painful development, its glorious achievements, that it has been produced, as he himself and everything else in nature, by naturalistic causes.

V

The belief in a supernatural, anthropomorphic God, either as a person or as mind, guiding, controlling and protecting

society to-day, takes the place of the guidance of society through institutions based on verifiable public corporate knowledge—the social sense. If God be a person, then He must have a body; for personality consists of the energies constituting matter organized with the energies constituting the conditions of matter. If God be mind, then it must have a brain; for mind is the condition of brain matter containing the registered energies of matter and the registered energies of external nature. Both concepts are utterly absurd. And why any man should worship such a being to obtain salvation shows how completely the emotion of species-protection (religion) in man is perverted, blind, especially when it is further remembered that such worship is attended with mysterious ceremonies, useless practices and absurd forms.

The only object in the universe worthy of sacrifice is society, for to it, and not to a supernatural God, does the individual owe all of his morality, his sociality, his intellectuality. The devotion, however, that society inspires is not the meaningless ceremonies of theology, but intelligent work at the uplifting of the human race. This is naturalistic religion. So far in history man has reached his present degree of development without dominant social control. If the individual now can be coördinated with the social organization, then a social organism will result which will be intelligent in proportion as the individual is intelligent, and we may expect to see a race-devotion (religion) among men greater in proportion as man is greater than other animals. This will be the realization of the true religion dreamed of by prophets in all ages, the one emotion lacking to-day to make life full and complete despite the ills attending conscious existence. Religion is not based on the supernatural, but instead is subject to a naturalistic explanation as we shall see more fully in a subsequent part of our investigation.

There is no such thing as mind outside of organic prod-

ucts; for there is not a scintilla of evidence to show any of that economy in the universe, the solar system, or inorganic nature here on earth that is seen in organic nature due to mind. All phenomena are known in their effects and a test for mind can be made as easily as one can be made for heat, light or electricity. The test for mind is order, not the order of the universe, the solar system or inorganic nature produced by the antagonism of energies, but the order, for example, of an animal, resulting from an economic expenditure of energy which the substance protoplasm has the ability to make and perpetuate in its offspring, which in turn increases the ability until finally the human mind is produced, being able to economize not only its own energies but also most of the energies of inorganic nature. Mind adjusts means to ends; nature's ends are the resultant of the opposing energies blindly neutralizing and wasting one another. The order of mind is a distinct improvement upon the order of nature, as the order of society is a distinct improvement upon the order of mind, and one who cannot see this has not the acumen necessary for a scientific investigation of nature, the individual and society. The adjustments we see in the universe, the solar system and inorganic nature here on earth, from the human point of view, are at inconceivable waste of energy. There is none of that economy of energy, none of that plan or purpose, which we would see if the universe, the solar system or inorganic nature here on earth were controlled by mind, instead of the blind battling of natural energies expending themselves in the universal process along the line of the least resistance determined by the contending energies. We are so in the habit of looking at the universe, the solar system and inorganic nature here on earth as if they were perfect, owing to our theological conception of things, are so afraid to mention a defect even if we should find one, and are so impotent ourselves, that we see reluctantly what all of these wonderful phenomena could

be had they been produced by mind instead of the blind battling of natural energies.

The erroneous notion that mind is back of the universe comes from an imperfect concept of what the mind really is, and a belief that any and all order is a result of mind when it is only economic order that is so. We know of no mind except the animal mind and the human mind, and they are different only in the degree of development. The human mind is the residua of the energies it comes in contact with and, despite its lowly origin, it is capable of conceiving what the universe is, because the energies compassing the universe are identical with the energies affecting the mind. But for the thought-shopping theories of theology, chief of which is a belief in a supernatural God, mankind, no doubt ere this, would have formed a true concept of the universal process, and would have arrived at ultimate answers to the fundamental problems of existence.

But may there not be a supernatural mind? Then there would have to be a supernatural organism that could receive impressions from supernatural energies in a supernatural universe. But we do not see any supernatural economy in the universe, the solar system or inorganic nature here on earth, but instead an incalculable waste of energy which the puny mind of man can suggest methods of saving, though now too impotent to apply except here on earth. This search for a supernatural God is pure anthropomorphism.

Let us look at the facts as they are: Mind only knows what it comes in contact with. It is a phenomenon pure and simple, and is not as superior a way of controlling energy as the moral and social senses, as will be shown in a subsequent part of this work. The human mind was made by the external energies registering themselves in the human organism with the function of guiding the organism in nature, and for that purpose it is admirably adapted, but when it comes to controlling the expenditure of the energies

of human beings in society it signally fails, and only for the development of the moral and social senses human society could never have been developed. Mind is neither as God-like nor as powerful as the moral and social senses. Mind no doubt is a wonderful thing, but the most wonderful, God-like thing in all the universe is not the intellect, but man's social nature, what in this work is called the moral and social senses.

When in the course of the universal process it becomes necessary for us to form a concept of the universe, we do it in the terms of nature immediately around us. Nature is a repetition of similar parts, so our concept of nature about us is a key to unlimited space and time. While mind is purely a local phenomenon, yet it is God-like in its range of vision when unhampered by thought-stopping concepts. Kepler, before the law of gravitation was known, was compelled to assume that spirits controlled the planets in their orbits; so every one, before the laws of nature, the individual and society were known, before the control of society by the moral and social senses was discovered, was compelled to assume that a supernatural God controlled and guided nature, the individual and society. But we know better now; we know that all the phenomena of nature can be explained in terms of matter and energy, and that matter and energy can be explained in the terms of life and mind, and that it is the function of society to direct the expenditure of all energy into the most economic channels possible.

The only design there is in nature is put there by the imagination of man; the only design there is in society is put there by society itself; for design consists in expending energies, whether of nature, the individual or of society, in the most economic manner possible, and is nowhere seen in nature or society except as a result of animal or human intelligence.

It is impossible for human beings to change a law of nature; but it is not impossible to modify the structure of nature (matter) so that natural laws will act to human advantage; a natural law being the invariable way an energy expends itself in nature. So it is impossible for society to change human nature, but it is not impossible for society to modify the conditions of the expenditure of human energies (knowledge, ideals, institutions, laws, morality) so that human energy, feelings and emotions will act to social advantage; human nature being the variable ways human energy expends itself in society. In each case there are two factors: energies and structures in which the energies expend themselves; and while the energies cannot be changed as to their nature, the structure in which they act can be changed, and that is all that is necessary to make the individual the perfecter of nature and society the perfecter of the individual. This is the origin of all the design there is or can be in nature and society. Just as man can arrange apparatus to control electricity, so can society invent institutions to control selfishness, lust, cupidity, tyranny and all the other individual energies that are unsocial. Each is a problem in mechanics, and both are certain of ultimate solution in the course of the adjustment and readjustment of things during the universal process here on earth.

We live in an age of naturalism. Society is the arbiter of nature, the individual and its own destiny, not some supernatural God.

VI

There is an unconscious kind of mind which we call instinct. It is mind produced by external stimuli upon an organism uninfluenced by other experiences of the organism. As soon as this unconscious kind of mind becomes sufficiently developed to utilize itself in developing a further growth of mind we call it reason. Reason is classifying. There are

several different ways of expending energy. An individual receives an impression from the environment; to reason is to pass in review the several ways of expending energy and let the internal liberated energies take the one that will expend the energy of the organism in the most economic manner possible. There is no design in nature except through reason; for design means to make the energies of nature expend themselves according to a plan, an object, an end. The plan is an idea. Design is to expend the energy according to some definite economic plan and the plan may be unconscious as in instinct or conscious according to reason. The action resulting from instinct, being followed for countless ages, controlled by the laws of repetition and natural selection, results in wonderful structures, yet the result is not thought out, not planned. It is due purely to natural adjustment and readjustment under the laws of repetition and the law of natural selection. Life, and all the wonderful organs of our wonderful body, is due to response to external stimulus, the law of external repetition adapting the organism to the environment, the law of internal repetition preserving the beneficial adaptations made by the law of natural selection. This is the story of animal life from the first protoplasm up to man.

There is a kind of society that is unconscious. It is our civilization, for society to-day has not yet reached the stage in its existence corresponding to the age of reason in animals. Society to-day is produced solely by the interaction of its individuals, uninfluenced by society as a conscious organization. It is similar to an animal controlled by instinct and devoid of reason. Social actions are due exclusively to stimulus and occur invariably in response to the one stimulus, the ensuing action not being controlled by other experiences inherited from the past. No new methods of expending energies are consciously devised, only by the slow process of individual initiation. As soon as human knowl-

edge becomes sufficiently developed so that society can consciously devise institutions for the expenditure of its energies it will be fully oriented and will act consciously, and the individual will enter into that perfect state dreamed of by poet and philosopher in all ages. The design we see in society to-day is not due to public, verifiable knowledge, but instead to present stimulus in the form of expediency, policy, necessity, the law of supply and demand. There is none of that looking ahead in society to-day which characterizes all scientific knowledge, but only the planning of social instinct which takes a rule and follows it without knowing how or why. So far in civilization society has not attempted its highest possible form of life, that of directing itself as an organism by scientific, public, corporate knowledge, instead of blind feeling or instinct as we see in society to-day. Whether or not this control is to come about with this present civilization, or that humanity will suffer another great wave of depression similar to the Dark Ages, such as have occurred many times in the history of the race, as is evidenced by history, will be seen within the twentieth century. The great giant humanity will either use scientific knowledge with which to perfect himself, or else see the horror of his situation, know too much for his power of accomplishment in comparison with the reformation and development to be made, and in despair, Hamlet-like, become mad, let revolution, anarchy, irreligion, and other social diseases destroy him, as when the wild barbarians came down from the north and destroyed the civilization of Greece and Rome, and then, with his mind purged of futile knowledge and filled with the hope of rejuvenated youth, begin to form another civilization whose every stature rises higher and higher with every civilization, until the perfect orientation of the race shall have been accomplished and the ultimate socialization of the giant Humanity be attained.

VII

The chief reason for not discarding supernaturalism to-day is on account of its association with religion, humanity believing that to forsake supernaturalism will result in the extinction of religion. Such is not the case. It is true that morality and religion are intrinsically sacred, but no belief is sacred except the truth, the verifiable relation existing between the mind and the environment consisting of nature and society. Religion became associated with a belief in God and an immortal life beyond the grave by originally being the worship of some natural phenomenon personified, or the worship of some hero that had rendered great service to the tribe in time of tribal peril. In life the hero was paid the greatest homage and at death his spirit received divine worship. In the great struggle for existence between tribe and tribe that tribe survived which had the strongest organization, and this was the tribe that used the imaginary hero beyond the grave to enforce the decrees of the living tribe left behind. The imaginary life beyond the grave made the life of the hero-ruler continuous throughout great lengths of time. The ruler became immortal, hence there was no disruption of the tribe at his death. From this belief in an immortal ruler of the tribe, that could reward and punish as a living ruler, there grew up a belief in an immortal Ruler of the whole universe, anthropomorphism, supernaturalism. And this belief in God became the greatest, and is the greatest stimulus to religion to-day; for through it the tribe, the nation, and to-day western civilization is bound together. The primal function of religion is that of binding the tribe, the nation and ultimately humanity together in one organism, hence the sacredness of the belief in God and the close association of religion with supernaturalism.

It did not take a great amount of knowledge to show even primitive man that a physical God was an absurdity. Hence the spiritualization of God, followed by the spiritualization

of the life of man. But to show that there is no discovery in this, let us examine the meaning of the words used to indicate spiritual states. *Spiritas*, means breath; ghost means gas; all the terms to indicate the supernatural are but attenuated forms of the natural. What God is, what spirit is, is pushed back farther and farther into the realms of unreality, have become less and less believable, hence the belief in God has ceased to be the powerful stimulus to religion, to racial solidarity, as formerly with primitive man.

To-day we have a belief in a supernatural God and an immortal life beyond the grave, and as the original useful belief in the divine hero stimulated the emotion of religion among our primitive ancestors, because through it the tribe was unified and perpetuated, so to-day the comparatively useless belief in a supernatural God (useless because not really and truly believed in by western civilization for the last two or three centuries) and an immortal life, likewise stimulate the emotion of religion, but to a much less extent. Religion is not based on the supernatural, but on any belief natural or supernatural that will unify, will solidarify the human race. Religion is always found to be due to some race-serving function, no matter how remote, let it be a belief, an act, a ceremony, a hope, or an actual service to the race consciously rendered. To religion the race owes its solidarity to-day no less than when it meant simply obeying some dead hero out of gratitude for past service, or for fear of future punishment. Without religion the race cannot exist; however, it is not religion based on the supernaturalism of to-day that is so essential to racial salvation, but the religion of the moral and social senses, a religion of pure naturalism, a religion in which morality and religion sustain to each other the relation of cause and effect.

VIII

For every kind of aggregation throughout the universe there is a corresponding energy causing it in the aggre-

gated body or organization. In all inorganic compounds the organization is affected by chemism. The animal body is alternately driven by want and attracted by satisfaction, feelings and emotions that act as natural energies and bind the organism together. The union of the sexes is secured by the powerful emotion of love. The aggregation of the family, the tribe, the nation, the race, produces religion and is sustained by it. Whatever promotes the aggregation and organization of humanity produces the emotion of religion. At its beginning the stimulus of religion was the direst superstition, and after passing through supernaturalism its stimulus becomes the purest morality; for pure morality alone can effect the perfect organization of the human race. Religion is the instinct of social preservation, as love is the instinct of reproduction of the animal organism, and appetite and hunger the instinct of self-preservation.

Religion, in order that it may reach perfection, must discard all supernaturalism, be placed on a scientific basis, be engendered by actual service to the race instead of sacrifice to an imaginary God. The beautiful and time-honored belief in a supernatural God must give place to the facts of existence; and the facts will show humanity a greater necessity for racial unity and racial solidarity than this great belief has done. And the glorious dream of immortality, a supernatural life beyond the grave, must give place to the truth of individual mortality; but the demonstration of the continuity of all nature, the practical immortality of the race, the realization of heaven here on earth, and the truth, will be more satisfying than the dream. Energy expended under the great beliefs of God and immortality cannot be expended as economically or as beautifully as under the truth of naturalism; because the truth is the closest distance between any two points, the easiest over which mental energy can travel, and the most beautiful thing in the world. The race must be unified on the theory of the economic expendi-

ture of energy, and religion and morality must be exact corollaries of each other, and all of the fictitious methods of generating religion should be discarded, such as a belief in a supernatural God, the immortality of the soul, prayer, the means of grace, and the ceremonies of religion in general, now that it is known that religion has for its true correlate pure morality.

The only way to experience true religion is to do real service to the race. It requires no priesthood, no ceremonies, but the living of our wonderful life according to the principles of naturalism as elaborated in the moral and social senses of our race. Man ought to know that religion is an emotion that can be produced by innumerable causes, and he should seek the fundamental cause, anything that unifies, preserves and perfects the race, all summed up in the words, pure morality, and he should make it the basis, the fundamental thing in our system of education.

Living in this age of material plutocracy, it looks as if there is nothing else in life worth working for but wealth, still under it all and running through it all is a vein of true religion, and humanity is becoming unified, socialized, more and more every day. Naturalism is at the bottom of our wonderful civilization, and it will inevitably lead humanity into the light, into the right.

The time will come when education will mean more than simply to train the intellect and the body. It will mean to develop the moral nature, and character as well. Men then will not be so anxious to acquire wealth as to use it for the benefit of the race, and there will be honors conferred for being good as well as being great. Happiness will not consist in being happy alone, but in making others happy; and true happiness will be impossible in the sight of all unhappiness. Sympathy, when the continuity of nature is fully grasped by the race, will be as strong as feeling, and the pain from a public wrong will equal the pain from a pri-

vate wrong. Then the social organization will be an organism with mutually dependent and interdependent parts, acting in mutual coöperation, rendering service for service, the object of all will be the object of each, and the object of each will be the object of all. Religion will be experienced by all, be the most common of all emotions and will produce the most exquisite joy possible to the human heart.

Supernaturalism has served its day. Man is ready to enter the realm of reality.

CHAPTER IX

THE EXPENDITURE OF ENERGY CONTROLLED BY MIND: THE FOURTH LAW OF MOTION.

I

Probably, immediately following the stage in the evolution of life and mind, as seen in the primates below man to-day, there was less progress made in animal development than at any other time since it began. Certain it is that no other primate except man has ever been able to get past the sheer individualism of animal life below man in the history of creation; yet in all kinds of animals we see efforts towards socialization; while bees and ants by becoming social have almost completely lost all individuality, a form of society that heretofore, happily for us, has been impossible to humanity, it always resulting in degeneracy, decay and extinction. With the origination of the individual controlled by mind nature seemed to have paused from exhaustion. The human race for untold ages overran the earth as animals incapable of social organization. After infinite efforts, through the law of natural selection and the laws of repetition, at last some fortunate tribe struck upon some form of social life which initiated the social *régime* we see so highly developed to-day, and which will ultimately end in the socialization of the entire race. It will be interesting to look at man simply as an individual although it is almost an impossibility to disassociate his individual nature from his social nature.

All the energies of nature, both internal and external, before the dawn of life and mind, followed the line of the least resistance, the greatest attraction, in their expenditure;

but instead of selecting this line from a number of lines from former experiences as animals do, they acted from present experience alone, blindly opposed, neutralized and wasted one another, following the third law of motion, that action and reaction are always equal and opposite. In their blind action, the external energies, in discharging the chemical energies of protoplasm, created the physical senses to guide to right action the chemical energies they liberated in organisms, and ended with the creation of the intellect in man, which not only controls the expenditure of the energies of his own organism but also directs the external energies of nature to his advantage. This is the first great controlment—the intellect controlling and directing the energies of the animal organism, both internal and external, and the blind energies of nature to its own advantage. It is a fourth law of motion, a fourth way that energy expends itself in nature, in that actions do not follow from present stimuli alone, but are modified by inherited forms of expenditure, instincts, and by forms originated in the animal's own life, ideas and concepts.

The fourth law of motion may be stated in the following language: To every action there is always a reaction; however, it is never equal and opposite, but instead the reaction is controlled by the animal acted upon, it expending the energy of the reaction along the line of the least resistance selected by itself from its instincts and ideas, residua of former experience, the ensuing action being exclusively for its own advantage and benefit. As the second and third laws of motion are modifications of the first law, so the fourth law of motion is a modification of the third law, that is, to every action there is always an equal action in an opposite direction. In the fourth law of motion, instead of the reaction to a stimulus being equal and opposite, as in physical nature, it is modified by the animal's inherited experience, instincts and ideas, forms of reaction, which furnish

the least possible resistance to the expenditure of energy, and thus introduce the notion of economy and purpose into nature, something hitherto wanting. Or the three laws of motion may be stated in the fundamental law of the expenditure of energy in nature, that is, that all energy in nature always expends itself along the line of the least resistance determined by the contending energies. The fourth law of the expenditure of energy differs from this fundamental law by determining the expenditure of energy by inherited experience in the form of instincts, ideas and concepts, instead of by the blind battling of natural energies. My exposition probably would have been clearer had I called energy, as expended by this fundamental law, the first law of motion, expenditure by the intellect the second, expenditure by the moral sense the third, and expenditure by the social sense as the fourth law of motion; but not wishing to vary the terminology of my predecessors too much, I have started where they left off, deeming it one of the banes of philosophy to be eternally making new terminologies.

The fourth law of motion substitutes one form of the expenditure of energy for another; it substitutes past experience in the form of instincts and ideas for present experience in the form of stimuli. The fourth law of motion has reached approximate perfection in man, making him a perfect individual, that is, a being who controls, through his mind, all of his own energies and the energies of nature about him to his own advantage.

II

The individual is man as nature left him before he originated society. His function, which is the function of the intellect, is to control and direct the opposing, neutralizing and wasting energies of nature to one purpose, the self-interest of the individual as an individual, so that the most powerful individual may be produced by combining both the

internal and the external energies of nature into one being. And this being was primitive man.

Man to-day is essentially a social being, and was so long before he had evolved into the highest primate, but society did not begin until *Pithecanthropus erectus* began placing external energies in service to himself; then it was that he began placing his fellow men in service also; and from this sheer individualism grew indirectly man's social forms of to-day. If the animal kingdom was as warlike at the advent of primitive man as to-day, it is doubtful if he could have survived. It is probable that animal life was pretty much a happy family with the exception of the carnivora and it is doubtful if they were so powerful and fierce as they are to-day. The domestic animals did as much towards their own domestication probably as man did for them.

Wonderful as he is, the achievements of the individual, independent of society, are small. In fact, if man had not been a being capable of social organization, there would be no civilization, or civilization would be a thing of insignificant proportions. There are but few animals, in the struggle for existence, which do not avail themselves of some social support as supplemental to their mental powers, and man's greatest merit is not his intellectuality but his social and moral nature; for, so far in evolution, it is to his morality and sociality that his development is due, and will be more so in the future. I doubt if there is an animal that is completely unsocial; for the most unsocial of animals sacrifice some part of their lives for the species by begetting and rearing offspring. Had man not been susceptible of social organization, he would have accomplished little, and would, no doubt, have been supplanted by some other animal in the struggle for existence that was social, as he himself crowded out of existence all of his competitors. While intellect can modify the three laws of motion to human advantage, yet intellect alone could never have utilized all the energies of

nature as humanity does to-day, the chief of all, the energies of society itself, still so wastefully expended for the want of social control. Intellect alone could not have originated cultivated plants, nor could it have improved the domestic animals as social man has done; for without the civilizing influence of association man would be so ruthless the world would be a battle of force and cunning, the individual against all life, and all life against him. Intellect alone could not have originated fine art, nor language, nor science, nor industry, to say nothing of government, religion and morality.

Wonderful is the story of humanity. It will never be told. We appear upon the scene of the drama with the beginning shrouded in mystery, the development of the story marred by an inartistic arrangement of the materials so that one can scarcely follow the narrative, the denouement, the orientation, democratization and socialization of the race yet to come. He who reads history aright, he who looks at science aright, can take in this vast phenomenon, look at it as a whole, see what it is, have a perfect understanding of it, the final product of the savage's dream, the barbarian's superstition, the classic's mythology, the Oriental's theology, the modern's philosophy, each being but an adumbration of the other and forerunners of our final *organon*, which gives a true concept of man's place in nature and teaches him his whole duty to himself and to his fellow man.

III

Nature is not choice in its means. All will readily admit that a society based on intelligence and morality is the only true society, for it alone can expend all energy with perfect economy; but, if nature cannot directly originate a society based on true principles, it originates one based on force and cunning, and gradually and indirectly evolves one based on intelligence and morality. This is what has

occurred in nature. It is with human energy as with physical energy. All energy in society takes the line of the least resistance determined by ideals, laws, institutions; if they improve, the line of the least resistance improves, and it is by this simple means that human society, following the laws of repetition and the law of natural selection, has been evolved. If man cannot be evolved by his virtues, he is evolved through his vices. The virtues are the social expenditure of energy, the most economical; the vices are the individual expenditure of energy, the least economical. If altruism cannot control, egoism can. By taking the individual method the way is longer, but the end is none the less sure, for ultimately the individual expenditure of energy reaches the same goal as the social expenditure of energy, only the individual expenditure accomplishes its end by waste, while the social expenditure accomplishes its end by economy. Nature and society always start out with the circuitous route to accomplish functions indirectly which cannot be accomplished directly; and this is due to the fundamental fact that there is no mind in nature, no morality in society, that the contending energies develop their own control, which leads them to perfection; in the case of the intellect it being produced by the energies of nature, and in the case of morality it being produced by the energies of society.

Human energy, feelings and emotions, follows the line of the least resistance, the line of the greatest economy from the point of view of the individual, and always expends itself in the same variable way; but when human energy is unguided by society, as it was with primitive man, and the logical and rank individualist to-day, from the point of view of society, while it ultimately works to social benefit (because disguise it as we may, we are really units in the social organism and are all working to the same end, only under different ideas, or egos), yet it always wastes itself in neutralization and opposition as do the physical energies in nature when

uncontrolled by the individual. If the expenditure of human energies in society did not end in the creation of moral and social senses, which regulate the expenditure of human energy just as intellect in the individual regulates the expenditure of physical energies in nature and cause the individual to expend his energies in the most economic manner possible from the point of view of society, then mankind would have always been an animal, such as we see the primates below him to-day. But, happily for us, this was not the case.

In the history of the race those tribes which expended their energies in the most economic manner possible survived in the struggle for existence and perpetuated their kind. The same is true of nations. The struggle for existence in nature is a struggle between units, the individual being the unit in the great struggle for existence in nature; tribes, nations and civilizations being the units in the struggle for existence in the race, and it is one of the bitterest in all nature and is carried on irretrievably to-day. It was by the severest struggle that the human race passed from the individualism of savagery to the socialization of our civilization. What the race really was before the dawn of civilization is only to be conjectured from the sheer individualism of our criminal classes, and what we observe among animals and savages.

IV

The great laws of human development, as of all development, are the laws of repetition and the law of natural selection. Whatever helped to adapt man to his environment was preserved; the internal law of repetition preserving the original form, the external law of repetition modifying and adapting it to the environment. Variation in organic forms is not left to chance, but it is initiated by the environment and perpetuated by heredity, the internal

law of repetition. Whatever is inferior succumbs to the superior by the law of natural selection.

The individual is able to control the energies of nature with his intellect, directing them to his own advantage, but when it comes to utilizing the energies of society, that is, using human energies for a social purpose, he signally fails. Only for the fact that selfishness itself indirectly, blindly and wastefully works for social organization by individual means, civilization could never have been developed. This is the doctrine of individualism, which teaches that individualism is the final philosophy, because it was the first. Individualism makes selfishness the basis of civilization, and if it alone was to act and humanity was not capable of any higher method of expending energy, then a civilization in which human energy will be expended with perfect economy will never be realized, and the hope of social democracy is a baseless myth. There is no intelligence in nature. We shall see in our investigation that whenever, owing to lack of social intelligence or social sense or lack of partial or complete social organization, human energy cannot be expended as economically by the tribe, the nation, and it can be so expended by individuals and classes, then the individual method is adopted for the time being—only, however, to be discarded whenever the moral and social senses are sufficiently developed to expend human energy in the most economic manner possible. This is illustrated in the origination of property, purely a product of individualism, but now upon the eve of socialization. Again there are other functions that are purely social and always have been so, as, for example, the origin and development of language.

The individual while avoiding conflict with nature through his intellect, invites conflict by his intellect when dealing with his fellow man. This is especially true of man in his collective actions. Through his intellect the individual escapes conflict with nature only to get into greater conflict

through it with his own kind. The individual can control natural energies through his intellect, but he cannot control social energies so that they will be expended in the most economic manner possible. The individual controls social energies the same as he controls natural energies, and thus makes the energies of the social organism expend themselves, not for the good of all, but for the good of a few. The individual through his intellect expends the energies of nature in the most economic manner possible, but with the energies of society he opposes force with force, cunning with cunning, and dissipates the greater part of human energy in the direst waste. Happily, as the environment developed in the individual senses, then intellect to enable him to expend his energies economically, and the more successfully to cope with nature and to use its energies to his own advantage; so man's contact with his fellow man in society developed in him moral and social senses, which enable him to expend his social energies in the most economical manner possible, whereby, when they reach perfection, he can live in peace and harmony with the whole race and expend all energy to the benefit of the race as a whole. It is true that the nations of the earth to-day give us little room to think that in the immediate future they will give up settling their destiny by the struggle for existence of competition, the controlment of the earth by the arbitrament of war,—that is, cease dissipating their energy in opposition and neutralization, instead of using all of it through coöperation and organization in the most economical manner possible; still, the tendency of things is to coöperation and peace, to the government of the race by intelligence, and if religion were based on morality, it would soon be realized. The growing economic dependence of nations upon one another, of the race upon its component parts, will ultimately end in universal coöperation, the abolition of war, the cosmopolitanization of capital, the ultimate socialization of the race,

even if religion fails to gain its pristine influence upon the race from the lack of intellectual sanction; for when the mart declares for peace, the tardy theologian will echo the cry, and we shall enter upon a new era, the socialization of humanity.

V

Individual control of social energy could never have developed civilization as we see it to-day; for the individual's control of social energies invariably ends in degeneracy, decay and death. Sometimes it takes centuries to reach its acme, but history shows that invariably all inequality, inequality of position, of power, caste, wealth or learning, has ended in the destruction of the class possessing it, and often of the entire nation permitting it, for the disease of degeneracy permeates the whole nation in which it acts.

Happily for the human race, man's primitive ancestor was not simply an intellectual being, but one singularly fitted for social organization as our civilization attests. The dominant races to-day are probably as warlike, if not more so, than the dominant races at any other period of human history. The development we see to-day in civilization is not the result of one season's love, nor one year's peace; but, instead, of countless centuries of conflict, infinite essays of ebbing and flowing humanity, pushing this way, pulling that way, ceaseless migrations from the south to the north, from east to west, persistent intermingling of blood and ideas, the spending of centuries in following some *ignis fatuus* of the mind, never being in a hurry to do what is right and never doing anything sensible because it is sensible, stagnating as a dammed-up stream, then bursting as a flood in revolution, even making the vagaries of the insane fundamental philosophy—what an infinite waste of human energy! And think of humanity and its future. All of the paths yet to be tried before mankind reaches the goal of perfect adaptation to its

environment, before it reaches socialization! Dramatic indeed is the history of humanity when looked at in the light of a natural phenomenon, with its futile dreams, its vain but uplifting hopes, its blind faith, its endless struggles, its hopeless quests, its pitiless situation, its wonderful adventures, its marvelous development, its sublime destiny; and yet withal its final approachment to democratization and socialization!

It is wonderful to contemplate even in outline the achievements of the race that have been handed down to us in history, tradition and the debris of former ages—such as mechanical inventions, which harness the physical energies; the fine arts which give expression to the romantic side of the emotions, the cultivation of plants and the domestication of animals, the invention of language and printing, not to mention the more social institutions of government, the school, the church and religious institutions. How many centuries ago has it been since man invented the wheel and axle, and who was the unknown genius to originate it? The wheel and axle, that wonderful form of locomotion, which nature was incapable of originating directly, choosing through necessity instead the clumsy device of having an animal fall and catch itself and thus push itself along as we do in locomotion! Who was it who invented fire or first utilized it in cooking food? An art of incalculable benefit to the race! Who knows but the first person (doubtless a woman) who set out a plant was martyred for attempting to improve nature! Socrates was poisoned by the Athenians for attempting to improve men! The unknown person who discovered the use of iron did the most for the race of any human being. Perhaps it was Neter, the ancient god of the Egyptians, whose hierographical symbol is the ax, doubtless the first implement made from iron. How crudely everything has grown up in the life of man. The tom-tom and the gong are but the beginnings of our modern orchestra.

A rolling log is the beginning idea of the modern locomotive; the floating log of the modern ship. We know gods did not make these things. Each age for millions of years added its improvements according to the law of external repetition and the result was repeated with the improvements by the law of internal repetition, and the law of natural selection acted over all. Nothing has been lost, until to-day we see wonders God-like in their mechanism. It is so of everything about us. It is so of our ideas. Everything can be traced back to our primitive ancestors, when they began taking delight in being social and began experimenting with the energies of nature and their own energies from a social point of view.

All of this is in the dim past—unwritten history of the individual in his vast achievements on earth. No one man ever accomplished much. The individual is strong not of himself, but because he is capable of organization, and through organization to bequeath his work to the race to be perpetuated for all time. What would life have amounted to, after it had been produced, had it not been capable of living forever through the simple process of death and reproduction? It is in this way that life not only preserves delicate compounds, but constantly makes them more delicate, until to-day man is capable of knowing really what he is by this simple return of a thing upon itself we call mind. So of institutions,—they, too, live on and on by metamorphosis; institutions that we see to-day may have been so crude in their beginning that all likeness to their finished product is lost; the state, for example. It is to the organization of individuals, society, that is due the great achievement of the race; for without organization man would be an helpless animal, poor, feeble-minded and pitiful. Such is the condition of most of the animal families on earth. It is almost impossible to conceive the part of our lives that is due to the individual and the part that is due to the race; but we can get some idea by glancing at the condition of unsocial sav-

ages and seeing, too, how helpless the rest of the animal creation is, chiefly due to lack of social organization. Had the carnivora the power of combining in social organization, it would certainly have exterminated man before he developed weapons to contend with it. Imagine an army of lions and tigers with the organization and discipline of men,—would not they even exterminate us to-day? How happily for us that man is the only truly social animal found on earth, and that primitive man, with his cannibalism, held within his savagery the seeds of socialization of the entire race, to be realized in the coming centuries!

Man began with individual democracy; he will end with social democracy. Social energy can be expended in the most economic manner only through the democratic state or society. It is impossible to organize society on any other healthful basis. Greece tried it, half free and half slave; Rome, half noble and half plebeian; modern society in Europe has its privileged classes and proletariat; in the United States we have a government of the privileged capitalist that will have to give way to a government of the people, for the people and by the people, a government in which all just power is derived from the consent of the governed, a government with equal rights to all and special privileges to none, a government in which opportunity will be equal to all and every one will have economic freedom, and the greatest happiness to the greatest number will be realized. This is the social democracy of the future.

VI

Nature outside of human life is unmoral. It not only rains upon the just and the unjust alike, but nature rewards the just and the unjust alike. Morality is nowhere found outside of human life. Primitive man knew nothing of it. He lived by his wits alone. The only protection primitive man had was his cunning. He had all of the atrocity of the

carnivora and all of the cunning of the primate. Vice was his only life. Nothing shows the human race to be a godless product of nature so much as the contemplation of the struggles, sufferings and hardships of primitive humanity when controlled exclusively by the principles of individualism. It is appalling, horrifying, epic! And nothing so swells the heart with hope as the knowledge that man with all of his savagery, unaided, unfriended by God or nature, has achieved his present high development by his own untiring, persistent efforts! So far as nature is concerned, it being unmoral, the immoral individual, if undetected and uneducated by society, or if living outside of society, as the primitive individual lived, instead of being handicapped by his immorality is assisted by it in his ventures. This is the reason that even with us to-day, owing to imperfect moral and social senses, judiciously dishonest individuals more often succeed than plain honest ones. Unmorality is the method of nature, the method that made the individual what he was before the origin of society, the method of expending energy that causes him to take advantage of every other thing and being in nature and use them for his own advantage. And only for the fact that individualism, let it be absolute, works to social benefit indirectly, society to-day could never have been originated. But because individualism ultimately ends in a form of society is no reason that the methods of individualism should be followed forever. The method of individualism is the method of expending energy determined by the contending energies (individuals in this case), and is just as great a waste in the expenditure of human energy as the expenditure of energy in nature was before life and mind were originated. It is destined to be supplanted by the social expenditure of energy, which determines the expenditure of all energy by ideals, knowledge, laws, institution, the moral and social senses, and which is just as great an improvement upon the expenditure

of individual energy as the fourth law of motion (the intellect) is upon the expenditure of the energies of inorganic nature. The social expenditure of energy is inevitably bound to occur, for the energies of nature always and at all times take the line of the least resistance whenever it has been determined by any given organization from physical nature to human society.

No doubt primitive man lived for ages simply as an individual, depending upon his intellectuality as a means of maintaining his existence, being incapable of forming any social organization. His great intellectuality can be explained on no other grounds. Had man been strongly social at his origination he would in all probability never have been so intellectual, and might have developed a form of society similar to ants and bees, society by the moral sense alone; for such a form of society is only compatible with low intellectuality; but primitive man's great intellectuality, secured by his ultra individualism, has ever kept him from such an inferior form of society and will do so for all time to come, although great individuals and classes have always attempted to make the social organism one in which the great mass of individuals are the workers, producers, and the ruling classes alone are permitted to live in the sense of being perfectly independent, having the opportunity to realize all of their hopes, ambitions and destiny. But owing to the innate democracy of the human race, such a form of society has always ended and will always end in degeneracy, decay and death.

Man owes his great intellectuality to individualism, because it must have taken a wonderfully acute intellect for primitive man to have maintained himself unaided by society in the struggle for existence in nature; but it will be to society, his moral and social nature, that he will owe his perfection, at which time he will utilize his wonderfully produced intellect to social advantage, it being purified by an acute moral

sense. Such is nature's blind, roundabout way of doing things.

Morality is the method of expending energy according to the ideals, laws, institutions of society created by the moral and social senses, the method that forbids one individual taking advantage of another, the method that forbids the individual taking advantage of society, the method of expending energy that will ultimately perfect the individual by causing his immoral individual energies to flow into social channels, reducing the conflict of individual with individual to the minimum, by adopting the rule of rendering service for service the race over. The moral and social senses guide, control and conserve the energies of the individual as the individual guides, controls and conserves the energies of nature, causing them to flow into channels beneficial to the individual and society.

Right and wrong are purely human concepts of expending human energy and have nothing whatever to do with nature outside of human life. Morality is purely a product of society, and has by no means reached its highest development, but is destined to reach it just as inevitably as all energy takes the line of the least resistance when it is once determined; morality being that expenditure of human energy which results in the greatest possible economy from the point of view of society. What we call evil in civilization is simply the method of individuals in expending their energies unguided by the moral and social senses, and from the point of view of society, it is simply waste of energy through neutralization and opposition, conflict, competition, war, vice, instead of coöperation, coördination and organization. Evil in civilization is caused by the expenditure of human energies according to human nature and not according to society. The waste of energy, through neutralization and opposition, when expended according to individualism is evil: although in the end it results in social benefit, yet

it is at the greatest possible consumption of energy. To do wrong in society is to act natural, act as original man acted before the moral and social senses were originated. To do right is to live according to the moral and social senses. The waste of energy through neutralization and opposition when individuals expend their energies purely according to intellect, cunning, disregarding the moral and social senses, is evil, although it may be perfectly lawful. Human energy expended according to the methods of society, the moral and social senses, is morality. There is no other.

But the human mind is haunted with the notion that things of themselves are not self-supporting; that they must be upheld by an exterior Power or else they will cease to be; that something occult is back of nature, back of society, back of everything. All this is due to the fact that the individual himself is dependent upon society for all he is or hopes to be; that it is God to him, in the sense that the facts that make him think there is a God are produced by society, God thus being a symbol of society

The theory of things that the universe is controlled by an external Power is due to the fact that man himself is so controlled, not by God but by society, and this notion of universal control is a kind of anthropomorphism. Nature is as it is simply because it is impossible under given conditions for it to be otherwise. As the conditions change, through the universal process, the eternal adjustment of radiant and gravitant energies of the universe to each other, nature here on earth will change; and as man can control conditions, so can he control nature and himself; and as society can control conditions, so can it control nature, man and itself. The trouble with primitive man was, that in his theory of things he drew upon his imagination instead of upon the facts, and that is the trouble with us to-day. We still look at nature and society allegorically despite the fact of the wonderful scientific knowledge of to-day. Instead of

morality being God-given, it is society-given; and instead of nature being the product of a God, it is a self-adjusting, self-regulating and self-sufficing organization with every determining factor within itself and open to our observation, study and investigation. The time will come when the mind of man, the acquired and inherited representations of nature and society, will be sufficiently developed for man to see through nature and society as clearly as he now sees through an art product, trace the origin and development of all of the laws of nature, the origination of all of its organisms and their development, from the primal mist to the social organism; then all nature will be understood and will be subject to man and society by conquest, and the true greatness of what the matter and energies of the universe are capable of attaining will be realized.

VII

Man has been acted upon by two kinds of energy: physical energy, which adapted him to nature, and psychical energy, human feelings and emotions, which adapted him to society. In nature energies are wild, uncontrolled and waste themselves in blind dissipation. After countless ages, they developed in man his senses, then his intellect and emotions. Man, by his intellect, controlled the energies of nature, guided them to his own advantage, harnessed them in machines and made them work for him. But man's own feelings and emotions, too were wild and uncontrolled, wasted themselves in blind opposition and senseless conflict—sheer individualism. This is the condition of primitive man. Out of this great interminable waste of energy and conflict grew human society.

Social control began in an infinitesimal way, such as the coöperation of animals when they attack a common enemy, was repeated by internal repetition and then again modified by external repetition, as necessity drove human beings more and more to coöperate, by making those who did coöperate

survive in the struggle for existence between tribe and tribe. With such a simple beginning, working with such simple means, our complicated civilization has been developed after countless centuries of evolution. Whatever is good is repeated with modifications due to external repetition until external repetitions finally adapt man to both his natural and social environments. And thus finally the function of society is to direct the energies of the individual and its own movements as an organism, as the function of the individual is to control and direct the energies of nature and his own energies as an organism.

Just as the physical energies of nature created in man his senses, then his intellect with the function of controlling the physical energies of nature and his own energies, so the expenditure of human energy (feelings and emotions), in society created within the individual moral and social senses with the function of controlling and regulating the dissipation of human energy, making it flow into the most economic channels possible. Man is thus a double being, on one side an individual with the function of controlling the energies of nature for his own selfish use; on the other a social being, a unit in the social organization, which created within him moral and social senses, with the function of controlling human energies to the advantage of society as an organism. Now as man's mind controls the energies of nature, directing them along the channels of the greatest economy from the point of view of the individual, so does society control individual energy, through the moral and social senses, directing it along channels of the greatest economy from the point of view of society.

The primitive individual, with all of his intellectuality, would have accomplished little but for his inherent tendency to organization, socialization—a tendency due to the ultimate nature of matter, as we see it in the universal process; a tendency which will inevitably end in the socialization of the entire human race—the *summum bonum*.

CHAPTER X

THE EXPENDITURE OF ENERGY UNDER THE CONTROL OF THE MORAL SENSE: THE FIFTH LAW OF MOTION.

I

It is very difficult to get a true physical conception of the individual's position in nature. He is immersed in an ocean of air of unknown depth surrounding the entire earth, which is charged with many physical energies and is surrounded by many physical bodies that are related to him by mutual benefits and evils. The individual is in the field of all the physical energies of nature and is absolutely dependent upon nature for every moment of his life. He is a separate part of nature only figuratively speaking; in fact, he is closely interwoven, enmeshed, enveloped in nature by its energies, all of which act and react upon him constantly and without which he could not live an instant.

But, if the individual is enveloped in an ocean of air physically, he is none the less enveloped in an ocean of knowledge, pseudo-knowledge, belief and superstition psychically and sociologically. Just as it is impossible for the individual to be independent of nature, so is it absolutely impossible for him to be independent of the race. Just as the physical energies of nature are constantly acting and reacting upon the individual so are the psychical and sociological energies of the race constantly acting and reacting upon him. In both cases he is enmeshed, interwoven, a constituent part of the whole, intimately related to the whole, as an organ of the body is related to the body as a whole, and to think otherwise is but an hallucination of one's ego. Not to notice man's absolute dependence upon

nature, his complete dependence upon the race, is a delusion of one's individuality, which in the past served the purpose of creating in the individual an inordinate egotism, conceit, that made him attempt the impossible, thus ultimately enabling him to accomplish the possible. It made him think he was the lord of all earth; that the sun was made to light his steps by day, the moon by night; that he was the darling of the gods, a minion of nature, little less than an angel, the object of all creation. But this individual egotism, conceit, now is a deterrent to further human development, because it defeats the socialization of humanity in accomplishing the destiny of the race through social coöperation. Human arrogance is one of the strongest deterrents to universal democracy.

Man has always felt his utter dependence upon outside powers and, in his ignorance, placed this dependence in dream-life and in the imaginary world of gods and spirits, instead of upon the real world of nature and humanity. The dependence of the individual upon an imaginary world of gods and spirits to-day should be given up, because the greatest scholars and leaders of men no longer believe in them, and such beliefs, therefore, can no longer develop the moral and social senses, but instead are taken advantage of by designing individuals and are used for their own private benefit. The individual's dependence should rest upon the real worlds of nature and humanity. When so placed, man's psychical and sociological life can be studied the same as his physical life, and the moral and social senses consciously developed the same as the intellect. Man's psychical life will be then just as real as his physical life.

If there is a supernatural God, then it is absolutely impossible to have a scientific knowledge of nature and society, because science must be based on known facts, and the question, "Canst thou by searching find out God?" has never

been answered in the affirmative. That everything we see is due to a supernatural God is false in fact, but allegorically true in that God symbolizes the action of the race upon the individual. Real facts affect the individual as the imaginary God is supposed to affect him. All the evidence that man has used to prove the existence of a supernatural God is due to his psychical environment, hitherto inexplicable to him.

The race has outlived the function of the imaginary world to promote morality and sociality, no matter how useful it may have been in the past. Never before in history has the function of the imagination been fully guessed, nor an explanation why mankind was so dominated by it been made. No doubt in the history of the struggle for existence of the race many a tribe has become extinct because of its lack of imagination to invent gods and ghosts and other superstitions to enforce social decrees; but now the fear is that the race will become extinct because it cannot do away with its gods, ghosts and superstitions, and use scientific knowledge in their stead. We have outgrown the allegorical interpretation of life. The race is upon the eve of orientation, and this stepping stone of humanity must be discarded and the race use the ladder of facts upon which to climb to its true place in creation: the acme of all development through the moral and social senses based on knowledge and actual experience in living society.

The physical dependence of the individual upon nature is an ever present certainty, and man's psychical and sociological dependence upon the race is just as certain, but heretofore understood only allegorically as dependence upon God. Man first understands nature, life, mind and society mythologically, figuratively, sees the facts through a glass darkly; then follows science, and he sees the facts face to face. God originally was a ruler of men, and as such stood for the tribe as a whole. And while the religious man to-day does not know it, yet service to God is really valuable because it

is indirectly service to humanity; so that there is a deeper meaning in the allegory of God and humanity than one at first would think. But this is true of all allegorical interpretations of nature and society. All the phenomena of nature that have suggested the necessity for a God have been explained without one. The chasm between the organic and the inorganic has been bridged, the gap between mind and matter spanned, and the whence, whither and why of humanity determined. There is no need of the hypothesis of a God and an immortal life now. A synthesis of the facts of nature, life, mind and society has been made through the law of repetition; and the individual for the first time in all history knows really what he is and the destiny of the race in the greater destiny of things.

II

A child at birth is born into a physical and psychical environment. The physical environment develops its senses and its intellect; the psychical environment develops its moral and social senses. I have treated of the origin of the senses, the intellect and the emotions; I am yet to treat of the moral and social senses, and it is my purpose to trace the origin of the moral sense in this chapter and the social sense in the following, despite the fact that it is difficult to treat of the one and not of the other. Heretofore the development of both the moral and social senses have been purely unconscious, instinctive; but in the future their development will be perfectly conscious. This is the function of education. It puts a purpose in life, a meaning to our ceaseless quest for knowledge, our untiring efforts at the attainment of a perfect life.

With the evolution of the mind there is produced a new manifestation of energy, human energy, being the union of the gravitant energies constituting matter and the radiant energies constituting the conditions of matter, in an inde-

pendent organism, the individual; or differently put, being the union of the internal energies of will, love, ambition and so forth, and the external energies in the form of sense registrations, or intellect. It is simply the blind energies of nature turning upon themselves in self-apprehension and self-direction. With this union of the emotions and the intellect, the function of the individual, that of directing the energies of nature and his own energies to his own advantage, is perfected. The energies of the individual are always expended along the lines of the least resistance, such lines being the laws of human nature, the most economic expenditure of energy from the point of view of the individual, but by no means the greatest possible economy attainable in the universal process of nature. When the individual reaches organic independence, he becomes the unit of the social organism; and from the point of view of the tribe, the nation, the race, individuals in the expenditure of their energies are constantly brought into conflict with other individuals in the expenditure of their energies, resulting in opposition, neutralization and waste of human energy and ending in another form of control, the race's control of the individual through the social organism (a control similar to the control of the energies of nature by the individual through his senses and intellect), and thus terminates with the greatest economy of energy possible in all nature.

At this stage in the history of evolution, humanity originated the moral and social senses, through which social control is effected. The development and perfection of the moral and social senses by naturalistic means is the problem that confronts the race to-day.

III

Human energy, comprising feelings and emotions, like all energy when uncontrolled, expends itself along the line of the least resistance or the greatest attraction, the resultant

of the conditioning energies; and, in expending itself, registers itself in the nervous systems of the acting individuals by the law of external repetition, leaving residua which in time become a moral sense through which similar energies are afterwards cognized and classified and which has the function of regulating and determining the expenditure of the energies of the individuals in reactions from similar stimuli. As the physical energies have originated the physical senses in the animal organism to make it aware of external nature, so that it may expend its energies in the most economic manner possible from the point of view of the individual in nature: so human energy, feelings and emotions, in its expenditure in registering itself in human organisms, as adjusted in society, originated a moral sense in the individual, which makes him aware of human energies as they exist in human beings in society, and which determines the expenditure of his energies in society in the most economical manner possible.

When human beings in the expenditure of their energies, feelings and emotions, come in contact with one another, a conflict results as to which being shall furnish the idea, plan, the avenue for the expending energies. More often the conflict is between tribe and tribe. The idea or plan which gains the victory in the conflict will have a precedence in any other conflicts, but of course it will have to give way to any other idea or plan that is found to furnish an avenue of expenditure that is still more economical, that is, that can be followed with less conflict. It is possible that animals have moral senses this highly developed. When tribes, which have adopted certain forms of expending human energy—marriage systems, methods of holding property, kinds of government—come in conflict with other tribes which have adopted other forms, a tribal conflict results and the tribe having the superior forms, the one that best conserves the welfare of the tribe, produced by the superior moral sense,

dominates, conquers and controls. In the struggle for existence between tribe and tribe, the moral tribe, the one that has the superior moral sense and the consequent superior customs, laws, ideals and institutions, is, figuratively speaking, always the chosen of God, and they are the tribes which have overrun the earth as we see it to-day.

In the history of the race there have been many forms of marriage, many forms of holding property, many kinds of government, which are nothing but different ideas as to how the energy of love, cupidity and ambition shall be expended in society. This is true of all of man's forms of expending energy, forms of government, religious ceremonies, social customs, ideals and knowledge, and when one form of expenditure is established, it becomes imperative to the individual to follow it, and the race enforces its observance with all the cruelty and severity possible to primitive man's savage nature. In the individual these social methods of expending energy become a form or faculty (the moral sense, with us to-day, conscience and duty), by which all human energies are expended and determined.

At the beginning among the contending individuals at each new conflict, registered impressions of the severity of former conflicts influence the present conflict by furnishing avenues for expending human energy, until finally a superior avenue of apprehending and expending human energy is reached, which becomes tribal, and is rigorously enforced by all, called the moral sense. The development of the moral sense can be traced in each of our lives through the painful conflict we met with in trying to expend our energies, love, cupidity, selfishness, in opposition to it as it exists in society to-day, in arousing it in ourselves by punishing others for its violation and by meeting with reward in expending our energies in accord with it. The history of the moral sense of the race can be traced, beginning with the clan-morality of savages, extending to the Brotherhood of Man of Christian-

ity, and the unity of all life of Buddhism, and ending with the continuity of the physical, the mental and the social throughout all nature being the highest form of ethical culture possible to mankind.

IV

The moral sense is produced by the opposition and conflict in the expenditure of human feelings and emotions that the individual meets with in society. In the adjustment resulting that line of expenditure is adopted which is the most economic from the point of view of society, and when one form of expenditure once becomes adopted, it becomes a mental form or faculty, conscience and duty, and not to use it in the expenditure of one's energies results in pain to the individual, called a compunction of conscience; as to use it invariably results in an exhilaration called pleasure, happiness, joy, ecstasy. Conscience is the residua of the punishments and rewards of the race registered in us from the point of view of feeling, denouncing us for all actions that are injurious to the race and commending us for all actions that are beneficial to the race. A compunction of conscience is a reaction due to individual energy being dissipated contrary to the sensibility society has created in us, society thus showing us that in following individual passion, desire, or will, we have not expended our energies in the most economic channels possible from the point of view of society, but have wasted them in expenditure along individual lines in indolence, folly and vice. Duty is a reaction of society which makes us seek the most economic channels for the expenditure of our energy, that channel which best conserves the life of the tribe, the nation or the race, by producing in us pleasure, ecstasy, when our energy is expended through it. In fact, when a person does his duty the reaction produces in him the emotion of religion, although it is not always called by that name. To obey one's moral sense

always produces religious ecstasy, no matter if it be the direst prejudice, superstition, bigotry, or the sublimest altruism and humanity.

Any expenditure of energy that hurts or benefits the individual, let it be in nature or society, leaves residua of the experience, and when the same experience is again presented, we are afraid of it or are attracted towards it. Conscience and duty (the moral sense) are thus developed. The moral sense is a true sense in that it protects the individual by enabling him to apprehend at a distance, or in imagination, the various channels in the expenditure of energy that are either hurtful or beneficial, without actual contact, conflict or experience, so that they can be avoided if hurtful or followed if beneficial. Conscience and duty so far in the history of the race have been developed blindly, instinctively, the race not knowing that punishment and reward develop the moral sense any more than do animals know that procreation perpetuates the species, but to-day the development of the moral sense will be produced consciously as love is generated by man in his deliberate courtship.

Conscience and duty while perfectly explicable from a naturalistic point of view, yet are certainly wonderful products. Had not the race by punishment and reward possessed the ability to originate in the individual the moral sense, which punishes and rewards the individual in the absence of external society, the race would never have reached its present high civilization. No wonder that primitive man thought the naturalistically evolved moral sense a creation of God, for he could not see the workings of the facts on account of his belief in fictions. The God explanation of a thing stops all further thought until the hypothesis is abandoned consciously or unconsciously.

The function of the moral sense is to control and direct the opposing, neutralizing and wasting energies (feelings and emotions) of individuals to one purpose: the betterment of

society as a whole, through one's impressions of society as they come to him through his sensibility, pleasure and pain, in the absence of social knowledge or social sense; so that the greatest possible organization may be produced by directing all of the energies of all of the individuals of society into one channel, the greatest possible economy of energy from the point of view of society.

The moral sense is society's reaction upon the individual and the individual's registration of it. It is the beginning of that control of the individual by society which will end in his perfect control by it through the social sense; as the development of the senses in animals was the beginning of that control of nature by animals, which has culminated in man's control of nature through his intellect as we see it to-day.

This regulation of the expenditure of human energy by the race through the moral sense (conscience and duty) is a fifth law of motion, a fifth way that energy expends itself in nature, being a modification of the fourth law of motion (the intellect), as the fourth law is a modification of the fundamental law of the expenditure of all energy, that energy always takes the line of the least resistance determined by the conditioning energies. In the case of the fifth law of motion, the determination is by conscience and duty, and differs from the fourth law, determination by the intellect, in that it directs the expenditure of the energies of the individual into channels of right, virtue from the point of view of the race, in opposition to the self-interest of the individual.

V

Early in the history of the race the moral sense was called the voice of God. It is in fact the voice of humanity speaking to the individual, telling him how to expend his energies through the most economic channels possible, as worked out by the race after countless centuries of trials and tribulations.

With primitive humanity the chief source of developing the moral sense was a belief in God, who punishes and rewards in a world to come for actions done in this world. All the customs, ideals and institutions of the tribe were repeated in the mind of the individual until they were as much a part of his being as his individual nature, and he almost unconsciously followed them; but should he balk, attempt to use his individual notions of the expenditure of energy, then followed punishment, including torture, disgrace and death; and in case of meretorious obedience, reward of religious ecstasy was always sure. As a result the moral sense of savages is very acute, but owing to their imperfect social sense it is of a very low order; still, but for it, the race would never have reached its present high development. Conscience with primitive man condemns the expenditure of human energy according to one's individual nature as sin, a violation of God's law, and inclinations to such expenditure as temptations of the devil. This is an allegorical explanation of the facts which primitive man could understand in no other way. The chief difference between primitive man and modern man is that primitive man confused his dreams and his imaginings with his real mental experience, and this to the savage was an advantage, as to the civilized man it is a disadvantage; for primitive man based his life on fictions, while we base ours on facts. With the savage, the dead reign more potently than the living. Kings and heroes were thus enabled to hold the tribe together, not only for a brief lifetime but, through deification, for thousands of years. The imaginary world controlled as effectively as the real world, and enabled primitive man to supplement his impotency from ignorance with a supernatural God to enforce the decrees of natural society. But to-day to believe that an imaginary God controls society makes man dependent on God instead of himself. The unity of the race is effected to-day by the facts which show the solidarity of the race as an organism, upon

which the individual depends for all he is or hopes to be, and he owes nothing to the imaginary world in which he no longer believes. With an intellect not sufficiently developed to form naturalistic concepts of nature, man and society, primitive man—except for the invention of a national God out of a national hero to bind the tribe, the nation, together—could never have formed a social organization above the clan, if even that high. This is why God is so sacred. It was through a belief in God that humanity has been bound together, although not consciously, from the beginning, and it would still be so bound by this great belief to-day if it were sincerely believed in; but theology is a philosophy that has had its day along with the other mythologies of our race. The race stands in the presence of reality to-day owing to its high intellectuality, and there is no more use to invoke myths to cure social diseases than to invoke charms and faith to cure physical diseases.

The history of the expenditure of human energy shows that in primitive times dream-life and the imaginary world had more to do with human control than the real facts of human existence. If the imaginary world is believed in perfectly it is as real as one's living experience, and in primitive times it controlled the individual so his nature was in perfect subjection to the race; and much of our sensitive moral nature is due to the culture inherited from primitive man, to whom a dream was a fact and imagination and reality indistinguishable experiences. The effect of the race upon the individual was not only by living men, but the dead and the imaginary world. The individual in naming the effects that the real world had upon him, the facts of his social existence, his experience with those about him, always attributed his moral nature to the imaginary world of the gods; yet the real absolutely necessary cause in the development of the moral sense is the living, breathing humanity about us; for if one is reared free from all association with

his fellows he is devoid of both moral and social senses. Primitive man honestly believed in gods and spirits. They were a part of his life, and in order to bring the individual into subjection to the tribe, the powers of living humanity, the heroic dead and the imaginary world of gods were unconsciously and instinctively invoked.

The only way a savage can picture heredity to his mind is to believe that all who have gone before still live in spirit. Figuratively they do. Our ancestors live in us, not in a spirit land. The hero becomes a god not in the sky, but in our minds. But to the savage the facts are only possible of comprehension through symbolization of God and immortality. To-day the facts must suffice for us. Modern humanity stands in the presence of reality unrelieved by dreams or the imagination. To-day society by punishment and reward develops in us a moral sense (on the principle that the burnt child dreads the fire and that virtue is its own reward), before which all of our conduct passes for approval or condemnation. The moral sense is society in us compelling our individual nature to expend its energies for the benefit of the race. It is the fact in nature that gives rise to the belief that there is a God in the sky that controls us by reward and punishment. The control is from the race and is planted in us by punishment and reward, administered to us by our fellows about us. This is the naturalistic explanation of the moral sense, and its relation to the belief in God and immortality. The moral and social senses put us in exactly the same relation to society that the physical senses and the intellect put us in in relation to nature. In each case there is a return of the energies constituting nature and society upon themselves in the individual, in the case of nature resulting in self-consciousness, in the case of society resulting in social consciousness.

The moral sense of savages so far as it goes is very acute, but savages being almost deficient in social sense, there is little

development among them. Humanity to-day is not a complete exception to the primitive way of developing the moral sense. It is true we do not draw much upon dream-life—however, the imaginary world has not lost all of its potency yet, especially with children and the uneducated; but owing to the remarkable intellectual powers of the average individual, such invocation of the gods really in the end does more harm than good, for it is relied on almost exclusively to develop the moral sense when, in fact, most modern men no longer believe in the gods and myths of their ancestors and hence are deficient in moral sense. Better far would it be if humanity depended exclusively upon itself to perfect the individual's moral and social senses and would exclude these ancient means of development entirely. But it may well be doubted that, if primitive humanity had not had this ability of marshalling imaginary powers to enforce its commands, it ever could have developed a moral sense as acute as conscience and duty are to-day, or a social sense as far seeing as scientific knowledge is. Still, to cling to this primitive method of developing the moral sense now, after the individual has outgrown it, may result in defeating the perfection of the race by having adopted it at the start out. The day has come when humanity is able to stand on the facts of its existence, to let the fictions go as having served a good purpose and as now useless rubbish in the way of scientific building on the foundation of reality.

VII

We have seen the moral sense to be a result of the conflict in the expenditure of human energy in society. It is the soreness resulting from the punishment given us by society through shame, imprisonment, deprivation of honors, denial of privileges and a thousand and one other ways of hurting us when we expend our energies contrary to the decrees of society; or the exhilaration we feel from the applause, the

approval, the honor, the reward in position, wealth, or any of the thousand other ways society has of showing its approval and commendation of our ways of expending our energies when we expend them according to the decrees of society. Man's individual nature tempts him to expend his energies regardless of his social nature. Man is first an individual, then a social being; but the individual soon comes in contact with some social standard in his expenditure of energy and he is moulded into submission to society by the conflict he meets with, by the treatment he is subjected to, until soon his experience develops in him his moral sense; then he takes delight in living it and compelling others to live according to it.

When the moral sense is undeveloped, punishment and reward for not living according to it are from society, but when the moral sense is highly developed the punishment is within ourselves and cannot be escaped. Conscience is society in us that pursues our individuality as an all-feeling sense, as the social sense is society in us that pursues our individuality as an all-seeing eye which we cannot escape and which compels us to expend our energies according to the decrees of society. The individual cannot hide his sins from society; for through his moral and social senses society is in him. This is the truth in the myth of an omnipresent God who sees and punishes us for all our secret sins. If we do not listen to the voice of society in us and are so adroit as to escape detection by society outside us, then our vices write themselves in our faces and the world finds us out. This is why "murder will out," why the deed returns upon the doer. It is impossible for an individual to live in opposition to the race, let him be king, millionaire, a genius, a criminal, without suffering degeneration, resulting in a life of abject misery. The sooner the individual learns that the only way to be truly happy is to serve the race consciously, live his social nature

instead of his individual nature, the happier he will be. No man can live and be happy and oppose the race consciously or unconsciously. This is the reason so many people who think themselves religious are so miserable. It is not God that the individual should serve, but humanity. To serve God is symbolical service to the race. The greatest happiness is conscious willing service to humanity. This is true religion.

It is impossible for the individual to live unto himself. Not to follow moral concepts, when we have them, is to suffer remorse, shame, the pangs of conscience, for the wasted energies otherwise expended. Man's individual nature is punished by his social nature, until his social nature is dominant, or the individual ends in being a criminal and is brought into subjection by society, or taken completely out of it by the prison or the scaffold.

VIII

The line of expenditure of energy of the sense of touch or sensibility is the line of the least resistance of mechanical energy between the periphery of the organism into the chemical energies, thence to the motor apparatus of the organism; and it reaches perfection by reducing the friction of expending energy in the reactions of the organism on its environment, so that whenever the stimulus is felt the action of the organism invariably follows with the greatest economy of energy. What is true of the sense of touch in the animal organism is true of the moral sense, it too being a sense of sensibility, but produced by a different kind of energy than physical contact, human energy, consisting of human feelings and emotions as expended by human beings in actions guided solely by the intellect. The moral sense is a sense of sensibility, being the residua of contact with human beings coming in conflict with one another in the expenditure of their energy, the line of the least resistance or the

line that causes the least conflict being the resultant of the opposing energies of all the acting individuals, but usually one individual expending his individual energies in opposition to the tribe, the nation or the race. There is but one kind of action that the moral sense sanctions: that which secures present social welfare, being the line of the expenditure of energy selected by the race in the course of its long history, causing the least possible conflict. The moral sense is a kind of instinct, being concerned only with present feeling and emotion, and is widely different from the social sense, its function being to secure the greatest economy of energy by using all the knowledge the race has attained in the past and acquired in the present.

From the point of view of the individual the test of morality is feeling, sympathy, pleasure and pain; but from the point of view of the race it is social welfare, order, and may be in perfect opposition to the pleasure of the individual in the expenditure of his individual energies. The negative function of the moral sense (conscience) prohibits pain-producing actions, conflicts between individuals; the positive function of the moral sense (duty) compels actions that conserve the welfare of the race. Conscience and duty are the positive and negative sanctions of the moral sense. Conscience prohibits conflict by making individuals suffer remorse, shame, despair, for the wrong expenditure of their energies; duty compels welfare of the race by creating in the individuals a high elation, ecstasy, whenever their energies are expended along the lines called virtue, right. Morality from the point of view of the moral sense is a matter of feeling, not only feeling in the animal sense, but feeling in the social sense of sympathy, sympathy being social feeling. We perform certain actions because they make us happy and desist from performing others because they make us miserable. All moral actions are the most economical ways of expending human energy possible from the point of

view of the race. Society makes all of its individuals act the same way so as to conserve their energies. This is not true only on moral questions, but in every respect—fashion, custom, conventionalities, creed, politics, and business. If this were not so, then the energies of all of the individuals constituting society would be expended in useless conflict and the variation from the racial type would be so great that the race might become extinct. To expend energy according to the moral sense means freedom from conflict, peace, order, unity of race, and happiness to all.

The ideas or sentiments controlling the reactions from the moral sense come from sensibility or sympathy. The actions from the moral sense are performed blindly as an instinct, or they are guided by an intuition, an inspiration. Whereas the form of an idea of the social sense is an ideal, a reasoned concept, a mathematical plan. The individual feels that he must expend his energies according to the intuition or inspiration suggested by the moral sense, and he does so blindly; but he knows it is best to expend his energies according to the ideal concept suggested by the social sense, and he does so consciously. The distinction between the moral and social senses is similar to the distinction between feeling and seeing on one hand, and instinct and reason on the other.

IX

The race's method of creating and perfecting the moral sense is by punishing the expenditure of energy that disregards the moral sense, that disregards the race's methods of expending energy—acts that are purely individualistic—and by rewarding the expenditure of energy that regards the moral sense, that regards the race—acts that are a benefit to society as a whole. But to-day when the social aggregate has grown so large and the belief in God and the immortality of the soul have fallen into desuetude, it is almost impos-

sible, by such means, to develop the moral sense to that degree of acuteness necessary in order to make all men responsible to the race for all of their actions. This is the problem that confronts western civilization to-day, and it certainly will not solve it unless it sees that the moral sense is a natural product capable of development the same as the intellect of the individual.

The race can no longer trust to God for salvation; it must invoke the stern facts of reality and work out its destiny consciously, knowingly, courageously. The moral sense is developed by experience in living society and is not something due to imaginary gods. The God theory of things has been of great benefit to the race in the past; to many it seems to be one of the race's scaffoldings to civilization which cannot be taken away without destroying the whole structure. But this is purely imaginary; for really a belief in a supernatural God, in the sense our fathers believed in it, has been discarded long ago by almost all of the scholars of the race, the greater part of the leaders, and a goodly portion of the common people. Hypocrisy, pharisaism, is the philosophy of the leaders of men to-day as it has been in all past ages in transitional periods, as from mythology to theology, or from fetishism to hero-worship.

Just as nature developed the sense of touch by punishing the animal that disregarded its warnings by causing it to become extinct in the struggle for existence, and rewarded the animal that heeded them by causing it to exist, so the race has done in the past in regard to the development of the moral sense among tribes of men. And it must consciously follow this method to-day in developing the moral sense; for what the race did blindly, before the origination of the social sense, it can do to-day consciously after its development. Only those tribes and nations have lived in history which have developed a high moral sense, and western civilization will cease to exist if it cannot meet the

requirements of our vast social organization with a moral sense acute enough to take in all of our social disorders and remedy them by the social sense, making of the race a unity. Here in the United States of America we can no more dispense with punishment for every violation of the moral sense, no matter how great the individual, or how powerful the class, than could nature in developing the physical sense of touch; if we do, degeneracy will inevitably result, and spread throughout society until there will come a time when our nation as a whole will either go to pieces or be conquered by another which will develop in the individual the highest form of the moral sense and realize the most economical form of expenditure of energy possible to men, or is competent for such subsequent development; a virile savage is preferable to an *effete roué* to-day the same as he was in the days of the fall of Rome, only the savage to-day may be within the walls instead of without. Nor dare the race in western civilization fail of recognizing by reward the services of one in obeying the moral sense no matter how lowly the individual may be or else again will degeneracy set in, spread throughout the race and western civilization become extinct. As nature develops the sense of touch by pleasure and pain, which invariably act in the same way, so should the race develop the moral sense by reward and punishment, only society's action should be conscious, be under the control of the social sense.

We have reached a stage of development in western civilization where further development cannot take place except by the conscious development of the moral and social senses. The unconscious and blind methods that have brought humanity up to its present high development have done all they can do; the belief in an imaginary God has accomplished all it can do; if the race cannot consciously develop the moral sense, then our dream that western civilization is destined to be the last wave to reach the ocean plane of ulti-

mate socialization of the race is not to be realized and, as we followed Greece and Rome, and they followed Egypt and Babylon, our civilization will be followed by another that will ultimately reach the goal of socialization of the race, the perfect expenditure of human energy.

X

The function of the moral sense is to guide the energies of the individual, through feeling, sympathy, into the channels of the greatest economy, from the point of view of society; but it fails in a vast civilization like the Western World owing to the remoteness of the human beings acting and reacting upon one another. It is impossible to connect cause with effect by feeling and sympathy alone, in the absence of a scientifically developed imagination, in a vast society like ours. A man living in London, through the execution of his desires, his energies, may wrong another living in Omaha and never know it, his tort being accomplished by a system of customs, laws and business processes suited to life in small nations but unadapted to the complicated civilization of to-day so far as developing the moral sense is concerned, and which can be seen to be unjust and iniquitous only through a complete analysis and synthesis of the processes of civilization by an enlightened social sense. To-day, from lack of proper experience, both the positive and negative sanctions of the moral sense (conscience and duty) are often undeveloped. The business of the world is transacted largely by corporations, private institutions, artificial individuals, incapable of having a moral sense and only amenable to the social sense and the civil laws of the land. Men have ceased to come in contact with one another, hence they have no moral sense in business relations or a very weak one. Individuals thus can accomplish, through morally irresponsible corporations, what their consciences would never permit them to do as individuals. Corpora-

tions use individuals as individuals use nature, only in the case of nature the individual invents a machine, while in the case of corporations they invent laws, business processes, institutions. There is no advantage they do not take. Their right is only measured by their might. Corporations show no more justice, no more humanity, no more mercy in exploiting individuals than the individual shows in exploiting the energies of nature. It is a matter of business. Sentiment (the moral sense) plays a very small part in the business of the world as carried on by corporations to-day. No individual can follow his moral sense in competition with corporations, for if he does he will only incapacitate himself and benefit no one. This is the condition of affairs in western civilization to-day. The vast majority of persons being organized in corporations act regardless of the moral sense. No doubt there is a great saving of wealth in this system of coöperation, not for society as a whole, but instead the chosen few represented in the corporation, and as a result the vast wealth accumulated passes into a few hands and does not perform a social function at all, and is dissipated in individual follies and vices.

The hope of humanity is not only through the moral sense but the social sense, for the moral sense alone would be utterly incapable of handling the problems suggested by modern civilization. The social sense must see the way all energy is to be expended, and the race should base its institutions, laws, customs, business processes on scientific knowledge as well as feeling, sympathy, the moral sense. Conscience must be made acute by a scientifically developed imagination which will trace responsibility through corporations and classes to its original source and bring the consequences of his actions home to the individual in all their vividness. Man must discard all of his small notions of morality and sociality, born of tribal life, and adopt a moral and social nature based on the unity of the race. A differ-

ent value will be placed on civilization when religion is based on morality instead of theology. Then the social life of the race will be for the benefit of all, instead of a favored few, and the race will indeed be an organization with definite structure and definite functions.

XI

The expenditure of energy according to the moral sense is virtue; according to one's individual nature, vice. Honesty is not the best policy to the individual, but it is ever so to society, and through society to the individual. The prime function of the individual is to take advantage of nature, to use nature, to exploit nature, to direct the energies of nature to his own advantage. Dishonesty, injustice, duplicity, is for the individual to apply the same tactics to other individuals. Man is by nature dishonest, unjust, deceitful. It is society that makes him honest, just, humane, through expending his energy according to the fifth and sixth laws of motion, the moral and social senses, in opposition to the fourth law of motion, the intellect. The third law of motion is just, that is, being the expenditure of energy in which the action and reaction are equal and opposite. But the law of intellect, that of expending energy along the line of the least resistance selected by the intellect, is unjust; it is not equal and opposite. It is not just because it does not balance, the basic idea of justice. Nature is taken advantage of by the intellect, is treated unjustly, judged by the moral sense. Thus animal life is based upon an uneven expenditure of energy, and if morality extended to inanimate nature, animal life would be based on a wrong to nature. This concept gives us the fundamental nature of the intellect and what its function is, and shows us that man's moral and social nature correct and supplement his intellect, so that the great saving of energy by the intellect can be used for humanity instead of for the individual alone. The

intellect uncontrolled by morality would result in a society in which one individual would take advantage of another with impunity, so far as society was concerned, and the energies of individuals would be wasted in useless and endless conflicts; but the moral and social senses correct the law of expending energy by the intellect, and cause all human energy to follow the line of the least resistance selected by them, and all human energy is made to expend itself through ideals, knowledge, institutions, conscience and duty, in a perfectly economic manner. This is the truth in the myth of the fall of man. The function of the intellect is to take advantage of nature. Its function is to avoid the effect of the third law of motion, that is, that action and reaction are equal and opposite. It turns the energy of nature to the advantage of the one possessing intellect. So long as the intellect acts solely upon nature, its effect is purely beneficent, but when it acts upon other individuals then, if it is uncontrolled by society, it works injustice.

It is the function of the moral sense assisted by the social sense to furnish forms, ideals, institutions, for the expenditure of human energy so that one individual cannot take advantage of another, so that one individual cannot take advantage of all, as has been the case so often in the history of the human race and is so to-day; for the governments of the world, both sacred and secular, are still run almost exclusively in the interest of privileged classes. The time will come when man's moral and social senses will be sufficiently developed to institute a government of all by all—democracy. In the beginning, owing to man's imperfect development, governments could not be run in any other way than by individuals, but the time will come when the state, the church, and the school will perform their functions for all, and the race will live and work in perfect harmony. While this is little more than a prophecy, yet it is well to utter it, for the mere announcement of the goal, with a knowl-

edge of the principles of its philosophy will go a long way towards its realization. When our great individuals know it is to living, breathing, suffering humanity about them, and the great race that has gone before, that they owe all they are and hope to be not to some imaginary God, then they will think many times before treating their living brothers as they do the inanimate energies of nature. It is society that makes the individual civilized. It is society that makes him good, noble, true, beautiful. It is the function of society to regulate all of the energies of the individual so that there will be no conflict between his individual and his social nature; and the time will come when every one will hearken to society as they once hearkened to God.

Chastity is not a law of the individual, but it is a law of society. Society could not exist without it. All the virtues are lines of expending human energy arrived at by the race during countless ages of experience in expending energy and are in opposition to the original nature of the individual controlled by intellect. A vice is the dissipation of human energy in opposition to the moral sense; a tragedy is a dissipation of human energy in opposition to the social sense. Intemperance, unchastity, dishonesty, are vices; the wasteful expenditure of human energy in industry, in restrictions of trade, in senseless competition, in the conflicts of nations in war, are tragedies. Whenever society shall control the expenditure of all the energies of the individual, through the moral and social senses, then there will be no more vices and tragedies in civilization. A virtue to an individual full of animal life is a cross, until his nature becomes adapted to the moral sense. From the point of view of society, virtue is never a question of happiness to the individual, but welfare to the race; yet in highly developed individuals virtue is an exquisite pleasure. Pleasure and pain are the laws of human nature whereby nature controls the individual, until

he develops his intellect, and through which the individual as an individual reaches the height of development whereat society assumes control through the moral and social senses. Virtue and religion are qualities that belong to the individual not as an individual, but as a social being—virtue being a product of the moral sense, religion a result from expending one's energy according to the moral and social senses.

XII

The moral sense most nearly reaches perfection in the poor and ill-favored, for great individual power in the form of position, royalty, or wealth, even genius, makes one oblivious to the punishments and the rewards of society. Hence the world's great moral reformers have all been from the oppressed, abused and despised classes, the classes which feel the full impress of society in all of their actions, the class that is responsible to society for all it does. The race has ever been a victim of its great individuals—tyrants, oppressors, bigots, geniuses, the insane—and privileged classes—nobilities, priesthoods, professions. Great individuals and great classes always pervert and defeat the moral sense, which results in the degeneracy of the individual and the classes, and often the decay and destruction of the entire nation. Such may be the fate of western civilization. How happy humanity will be when there will be no more great men, but all mankind will be great!—no great classes but one great class, the race as a whole; then every one will be amenable to the race, prince and pauper, rich and poor, savage and savant.

The only form of society in which the moral sense can be perfectly developed is that of a pure democracy, either the primitive tribe of individual democracy, or the ultimate civilization, social democracy. In all other forms of society there will be certain individuals and classes so powerful that society can only develop in them very imperfect if any moral

sense at all. In monarchies the king can do no wrong, and in plutocracies the plutocrats can do no wrong. In an absolute monarchy the king's will is the highest way of expending human energy. At a glance one can see that humanity cannot reach the very highest form of moral sense under any form of society except pure democracy. Every one must be considered in determining the expenditure of energy of a given society, for it is from the feelings and emotions of all that the resultant of all of the contending energies is to be determined, and if any class of humanity is left out the resulting moral sense is a class moral sense and not humanity wide. Our morality to-day is still largely class morality, but it is growing wider and wider as the race is becoming more and more democratized. Morality begins with the one, spreads to the many and will ultimately compass all. Everything in society is individually initiated, but inevitably tends to socialization; and morality is no exception. In monarchies humanity develops a form of society independent of the monarch and carries the monarch as a kind of incubus. The same is true of plutocracies. The ultimate form of humanity is that form of society in which the highest as well as the lowest will be amenable to the race as a whole, and in which every individual will have an acute moral sense which will control him as the moral sense controlled the primitive savage when not to follow it meant extinction of tribe.

The moral sense is universal among mankind. It is the first condition of society. Mr. E. B. Tyler says:

"The asserted existence of savages so low as to have no moral standard is too groundless to be discussed. Every human tribe has its general views as to what conduct is right and what is wrong, and each generation hands the standard on to the next. Even in the details of the moral standards, wide as their differences are, there is yet wider agreement throughout the human race."

XIII

Right from the point of view of the individual is to direct all energy to the individual's advantage; wrong to direct energy to his disadvantage. Right from the point of view of society is to direct the expenditure of energy regardless of the individual's rights to the best interests of society; wrong from the point of view of society is to expend human energy regardless of the best interests of society. It will be seen from these facts that right and wrong are not only purely human, but that they are relative terms, and as society is now organized, individual rights and social rights are often in conflict. But if society were perfect, then individual rights and social rights would be one; until that day, however, whenever there is any conflict between the individual and society, society in the end will always dominate.

A person cannot do right unless he knows how and is sustained by a good character, the residua of right actions; nor can society do right unless it knows how and is sustained by good institutions, the residua of right thinking and right actions. But the question may be asked, is not knowledge of right and wrong innate in the individual? No more so than a knowledge of the laws of nature or the institutions of society. As the individual inherits a bodily structure, which is a repetition of the bodily structures of his ancestors together with the changes made in them by contact with external energies, so he inherits mental and moral structures, which are likewise repetitions of the energies producing them, being due to the internal energies that produce the brain structure and the external energies from nature and society that register themselves in it. If the bodily structure does not receive the proper experience to develop it, it remains undeveloped; so with the mental and moral structure, only if there is any difference, it is to a greater extent. At birth we are senseless, but external energies pelting upon our sense-structures soon develop them, which in turn

develop the brain. At first we do not know right from wrong, truth from error, but experience in society soon teaches us, soon develops in us by severe discipline the moral and social senses. Not one person in a million receives anything like the degree of development he is capable of, owing to lack of proper experience in a scientifically arranged system of education. The mind consists of the functions of the brain structure inherited from its progenitors, being an organ capable of the same or similar experiences that it was subject to in its ancestors, and a repetition of whatever energy it comes in contact with in nature, which can anticipate the hurtful or point out the beneficial, and whatever energies it may come in contact with stored in language and institutions. Whether the mind be perfect or imperfect depends very largely upon its experience in nature and society. An Anglo-Saxon child left with savages would grow up with the intellect of a savage, because its inherited mental structure, capable of a highly developed mind, not meeting with the varied education of civilized life would remain undeveloped. The same is true in the development of the moral and social senses. If an Anglo-Saxon child were brought up in savagery, its nascent moral and social senses not meeting with the ideals, knowledge and discipline of civilization, it would have the moral and social senses of a savage, because its inherited structures, capable of highly developed moral and social senses, not being subjected to the right kind of social experience, would never develop. Structure is the sensitized plate; it is the right kind of experience that develops the picture.

Of the two factors in social development, heredity and environment, environment is by far the more powerful; however, this is not always noticed, for very frequently the effect of the environment is taken for that of heredity. It is not heredity that makes China stationary, but its unchanging environment. Take a Chinese infant away from China and

bring it up in America, and it will be very much like an American child or *vice versa*. To see the true effect of environment upon a people take for example the United States. It is the most nearly oriented nation on the face of the globe to-day, due to its soil, climate, new country, new opportunities with nature, vast expanse, liberty, hence free institutions and new civilization. Here common humanity has had a chance to develop equally with the privileged classes. It is the social environment that is the most powerful factor in human development, the social sense, not heredity.

XIV

The motive of all action from the point of view of the individual is feeling (pleasure and pain), the expenditure of human energy according to human nature; but from the point of view of society it is virtue, the expenditure of human energy according to the moral sense, resulting in order and social welfare. Hence the conflict between one's individual nature and one's moral nature. But just as the animal organism, through the senses and the intellect, reduces the blind conflict and directs the wasting energies of nature, turning them to its own advantage: so society, through the moral sense, reduces the blind conflict of individuals, and directs their wasting energies, feelings and emotions, turning them to social advantage. While this analogy is not perfect, it is none the less real, and only lacks in perfection because of the low development of the social organization. But as the animal organism is in no sense a master of nature, only a guide to its wasting energies, thus making nature more nearly perfect: so the social organism is in no sense a master of the individual, only a guide to his wasting energies, making the individual more nearly perfect. The most exquisite ecstasy possible to a human being is due to the performance of his social functions; the most intense pain is in being

balked by society in the performance of some individual function. The emotion following social duty well done is religion. The pain following the balking of the expenditure of individual energy is a broken spirit, and ends finally in surrender to the race, resulting in religious ecstasy

As man becomes more and more a social being, he will become more and more in harmony with social control, until the time will come when social control will be in perfect accord with individual expenditure of energy, and the conflict between one's individual and one's social nature will be a thing of the past. Then society will be organized, and all of the energies of all of the individuals will follow the lines of the greatest economy, greatest beauty, and the tendency of matter in inanimate nature and the tendency of matter in society will have been realized—the perfect individual.

The individual is the object in nature to which everything tends, and whenever in the history of the race a nation or people arose which disallowed this theory of life, it became extinct. The future society may be more socialistic, yet it will be so on account of the individual. Society exists because it is through it that the individual can reach a higher development and for no other reason. Society is not an end in itself, because outside of the individuals society does not exist.

The organization of society reverses the plan of the organization of the animal organism. There all the units exist for the animal organism; but in society the social organism exists for the units, the individuals. And not to keep this distinction constantly in mind results in serious errors in thinking. It is true this conception is seldom put in the above form, usually some class of society believing that the race as a whole should exist for its benefit; but this is a more grievous error than to think that the object of all is the social organism as a whole. The real object is the individual, and not some great individual, but any one and every

one. When I say object, I mean that by using this language I can express the tendency of things in the universal process better than if I should say that the tendency of things from the primal mist to the organization of society has been to develop structures that will more and more save the energies of nature, causing them to be expended in more and more economical ways, and that the organism of all organisms which accomplishes this best is the social organism, in which the intelligence of the organism is in the individual units instead of in the organism as a whole as in the animal organism, and that the tendency of things has been from the beginning to create such a socially conscious organism, simply because the tendency has been to expend energy in more and more economic ways, and it cannot be accomplished in any other organism. But have I in this statement used any the less teleological language? Society should be organized so that the weakest individual could put all of the social machinery to working in case of a wrong, as well as the greatest. Such a society would indeed be a social organism. Much of this is realized in our life to-day, but it is obscured by false syntheses, and we fail to see it until it is pointed out to us. Progress along these lines is often defeated owing to a failure of individuals to see their best interests and society as a whole to enter upon its conscious existence, a form of life in which the social organism will consciously develop the moral sense just the same as to-day it consciously develops intellect in the individual. Society does not develop the moral sense to-day; its development is purely unconscious, blind, as it ever has been. In the future it will be perfectly conscious.

XV

Society has two methods of perfectionment: feeling and knowledge, the moral sense and the social sense. All actions of the individual that are inimical to the social

organism, the moral sense punishes by the infliction of pain; all actions that are beneficial to the social organism, which are in a line with its previous experience, it rewards with preferment in society. Thus the will is directed into certain channels (the virtues) by making it painful to flow into other channels (the vices). If the social organism were as intelligent as the animal organism and knew all of the infringement of its laws as soon as they are made, as it will some day be able to do, when conscience and duty are fully developed; or if communications in society were as instantaneous and as accurate as they are in the animal organism, as it will be some day when we have a fully-developed social sense: then the method of securing conduct by feeling, sympathy, would suffice for proximate ends; for then society, whenever feeling a wrong in one part, would communicate it throughout society and would remedy it by an adequate punishment, and society would no sooner discover a merit than it would reward such merit by immediate success and appreciation. But with the social organism in its present imperfect condition, ignorant and bigoted as it is, not more than half of the infringements of its laws are discovered, and the greatest virtues not only go unrewarded by society but are condemned. Hence, in proportion as the punishment of vice, sin and crime fails through an imperfect moral sense in that proportion is civilization negatively a failure, and in proportion as merit is unrewarded through an imperfect moral sense in that proportion is civilization positively a failure.

The naturalistic explanation of education is that individuals, unlike animals, in adapting themselves to their species must acquire their senses to adapt themselves to their species (society) by conscious development. Animals live chiefly by instincts. Give them the external stimulus and they act blindly. Not so with man in society. Now, while the energy of nature develops the intellect of man by expe-

rience in living, yet the institutions, knowledge, laws and ideals of society, the materials that develop the moral sense, must be consciously experienced by the individual, and if society does not supply them sufficiently they must be developed and applied artificially. This is education. Man has two minds, one in the structures of his brain, one in the institutions of society. His mind in his brain develops naturally, although it can be helped much by artificial means (education); but if the individual is not carefully educated he never develops his social mind, the institutions of the race, and as a result has no moral and social senses. The chief education for this reason should be moral and social and not as under our system, inherited from the past, intellectual and individual. But this is natural, for society as to-day constituted is still a system of individualism despite our vast social organization. Our system of education is due to having our moral and social senses based on fictions and myths instead of verifiable truth. We think God gives us our moral and social senses. We get them from the race. It is true we acquire much of them symbolically, receiving the facts of society under the fiction of God. We do not teach morality in our schools, because we differ so much as to social sense (yet all take it from practically the same source, the Bible, tradition) that we refuse to teach any morality whatever. While we all ostensibly hold to the Bible and Christianity, yet to offer to teach either in the common schools in the United States would call out a world of objections. We do not believe in Christianity, else we would trust to its teachings to produce beneficial results. From experience we know better. The only development of the moral sense our youth receive is from training in the family and experience in everyday life, yet the further development of the race stops for want of a consciously developed moral sense. In an age of science like this, think of letting the very safeguard of the race be due to absorption from our

surroundings, conversation, popular literature, the theater and the daily newspapers! All of this will be reversed under a scientific society. The moral sense will be consciously produced through discipline, the same as intellect now is, and as a result individual perfection will be attained.

If the individual's moral and social senses were perfectly developed the individual would hold within himself both the individual and the race. Just as man's intellect is a mirror of nature so his moral and social senses are a counterpart of society. The moral sense is a repetition of society in the individual from the point of view of sensibility; the social sense a repetition from the point of view of knowledge. The moral and social senses are in fact society itself in us, a part of our constituent being. Society is in us as a God to be ever present to watch over the expenditure of our energies to reward the good, to punish the bad. The relation existing between man's individual and social natures will some day be perfect. There will be no need of external social control, except for the purpose of developing the moral and social senses, for the perfect individual will expend all of his energies with perfect economy by the control of his moral and social senses. Society will not have to coerce such an individual, for compunctions of conscience will be sufficient to deter him from wrong actions, and self-approval will be sufficient reward for his good actions as it even is to-day with the most highly developed individuals. With a society constituted of such individuals a perfect social organism will be reached. The individual will be just as much concerned with social functions as with individual functions. This is the acme of the universal process of matter—conscious social existence, directing all the energies of nature, man and society to the greatest possible economy, thereby securing the greatest organization possible to the matter and energies of nature and the greatest happiness of the human race.

With such an ideal as this to work to, social aspiration and social undertaking are very much simplified. Sociology at last has a theory and will soon have an art. The progress of the twentieth century will be phenomenal simply because for the first time in history humanity has taken upon itself its own salvation and based its existence on facts instead of fictions. The ultimate result will be the socialization of the entire race.

Just as the intellect in the individual, a part of nature, is a miniature reflection of all nature to be used by the individual to control and guide the expenditure of the energies of nature to the advantage of the individual, so the moral and social senses in the individual, a part of society, are a miniature reflection of all society to be used by society to control and guide the expenditure of the energies of the individual to the advantage of society, the greatest advantage of the individual. Thus the individual comprises within himself all of nature and all of society by being the object in which nature returns upon itself in self-consciousness, and by being the object in which society returns upon itself in social-consciousness. It is in this way that all of the energy of the universe acquires conscious direction and perfect economy. Man's wildest dream never over stated his greatness, as this analysis attests.

CHAPTER XI

THE EXPENDITURE OF ENERGY CONTROLLED BY THE SOCIAL SENSE: THE SIXTH LAW OF MOTION

I

The individual in addition to having a moral sense has a social sense consisting of the registered experiences of the individual in the execution of his ideas in society and what he may learn from language and institutions. The social sense consists of residua of knowledge, representations, ideals of society registered in the individual, being original representations and representations of others contained in language and institutions. In western civilization for the past two thousands years, Christianity has been the accepted social sense. To-day the social sense is passing from a supernatural concept of nature, life, mind and society to a naturalistic one. The ultimate social sense will be verifiable, scientific, public, corporate knowledge.

It is through the social sense that the individual understands society, that he performs his functions in society, that he interprets the representations of others contained in language and institutions, and in the ensuing actions from any stimuli it is the social sense that controls the action by supplying the most economic idea as motivated by the individual's animal and social nature. The social sense is the accepted body of knowledge of a tribe, a nation or the race, commonly designated cult, mythology, superstition, philosophy or theology; it is the race's knowledge of itself, stored in many ways, consisting of the popular concepts of the race, contained in tradition, public opinion, literature and

institutions. It is through this body of knowledge that the individual knows society, and performs his functions in society as it is through his senses and intellect that he knows nature and performs his functions in nature. This body of knowledge performs the function of a sense in that it receives, classifies, registers ideas of society in the form of concepts, and furnishes forms of expending energy which guide and control the expenditure of the energies of individuals in accordance with it. The uncontrolled and original ideas of an individual produce a certain low form of society; for each individual strives within himself to realize his idea of society, but as individuals act from different points of view, much of their energy is dissipated in neutralization and opposition. Naturally in this great conflict in the expenditure of energy among primitive people, controlled by individual ideas, some form of expenditure will be better than others; then the conflict instead of being between individual and individual is between the individual and this common form. This is the incipient social sense, beginning in the opinion of an individual, and ending in verifiable, scientific truth of society, after having passed through primitive man's allegorical interpretation of the facts of nature, life, mind and society.

The social sense determines what the individual shall think, what he shall know, what he shall believe, the breadth and depth of his being. It fixes the mode of life, the status of the individual, the position of art, the nature of government, what kind of conduct shall arouse the emotion of religion, what the social sense itself shall be. It is the social sense that gives a value to things, that makes one care more for a title of nobility than nobility itself, that determines human life in its most trivial as well as its most sublime operations. It will be a perfect social sense that will give a just proportion to our life and determine the expenditure of our energy so that the greatest amount of

happiness can be realized by the greatest number of persons through the perfect expenditure of human energy.

The social sense is a sixth law of motion in that it improves the method in the expenditure of energy of the moral sense through feeling, by conscious control through scientific, verifiable, public, corporate knowledge, and thereby secures the greatest possible economy in all nature.

II

What the individual is depends upon the social sense which determines his ideas of society and his relation to it. In the Orient he will be quite different from what he is in the Occident. He is even different in different nations. It is impossible for an individual to rise much above the society in which he lives, the reformer, or sink much below it, the criminal. The social sense to-day is developed by the sporadic variations of individuals, hence what any one individual accomplishes is very little. The same is true in its deterioration, but the increment, no matter how small, either effects the destruction of a tribe or nation, or its perfection.

Progress in morality and sociality in the race has ever been due to specialized individuals, to-day called geniuses, reformers, heroes, martyrs, but in other ages they were called prophets, seers, poets, heroes, fanatics, philosophers and the sons of gods. The society in which an individual lives becomes developed intellectually and morally beyond the social sense then in vogue, or probably some class is using the social sense to oppress humanity as a whole, as has been done so often in the history of the race. The individual contemplates the wrong. It develops in him an acute moral sense and he devises ways of remedying the public evil. This is an incipient improvement in the social sense. By constant contemplation of the dire conditions in society the individual becomes specialized. He is not like other people. He only thinks of the public wrong and how to remedy it. He

is turned into a kind of madman. He disregards his own life. He goes about and preaches. He is afraid of no one. He becomes inspired. He is a prophet, a seer, a philosopher. Such have been the saviors of humanity since it began, Buddha, Confucius, Jesus, Socrates, and countless others who have lived and died for humanity. It is through these specialized individuals, racial beings (for the instincts of the individual are almost completely suppressed in them and they are abnormally religious), that humanity makes any progress. To-day humanity is ready for a new savior, a new Buddha, a new Jesus, one who is abreast of the age intellectually, and who has the heart to lead the whole race to orientation, thence to democratization and socialization.

The only progress possible in society is due to these specialized individuals who feel and see that the expenditure of the energies in society can be improved upon and they arise and demand a change. Such was Savonarola, Martin Luther, the Fathers of the American Republic, and the social reformers of to-day. They have very often met with tragic ends, for the race is unable to distinguish between an innovator and a traitor. And the sad end of those who have introduced variations into the social organism, as a rule, has caused the sanest of reformers to desist, smother their feelings, suppress their ideas, and be conservative. As a rule our most conservative people in their youth are radicals, but meeting with dire opposition, severe discipline, they go to the opposite extreme; besides, youth is the dynamic stage of life, as old age is the static.

Most great reforms in the social sense have been accomplished by insane men, persons acting instinctively, blindly, dead to all life but their one mission, whatever it may have been. Such was Socrates with his *dæmon*, and Jesus laboring under the delusion that He was the Son of God and that He must die to save the world.

Society usually martyrs her originals, her prophets, her

seers; if not that, then they are ridiculed, neglected, persecuted and fall brokenhearted, unsuccessful, into an untimely grave. These specialized individuals are developed in society by lack of harmony existing between the moral and social senses and the environment, and the reformer attempts a readjustment and meets with death as a result. The moral sense is developed in humanity by repeating in humanity through sympathy what the martyr feels. The social sense is developed in humanity by repeating in humanity by imitation what the martyr thinks and believes. That one should die for his feelings and his beliefs looks to be great injustice, and in one sense it is so; if the life of the individual were the end of life, if the individual had no social nature, and if he did not receive any compensation for social sacrifice, if our life were only individual, then indeed the martyr would fail. But life is chiefly social. We live in the greater life of humanity, and service to humanity is never in vain, is always repaid with the most exquisite joy imaginable to the human heart. The martyr's death, from the point of view of our social nature, is the greatest success. This is why the martyr leaps into the flames with ecstasy on his face and shouts of joy on his lips, or bravely, heroically, does any great and good and grand work, that men may be better, that the moral and social sense may become more and more in accord with scientific truth. No doubt in the history of the race there have been hundreds of saviors, and there will be many more before the moral and social senses will finally reach perfection. Not all the great religious phenomena have happened; humanity is destined to have religious awakenings so long as humanity lasts, only religion will become more and more rational, until all of the dream-life and the imaginary world will be eliminated from it. Then it will be based on the facts of human existence, and be experienced by every individual living in society. How many to-day will there be who will recognize the specialized

individual who will come to preach this new religion, this Jesus come to earth again?

III

The race has always held sacred the body of knowledge constituting its social sense, let it be myth, tradition, history, Holy Writ, or even science, and the products of fine art have always been equally sacred. To criticize the master is a kind of sacrilege. To fly in the face of the social sense is blasphemy, and the race invariably punishes the offender, often with death. This is the naturalistic explanation of persecution.

It makes no difference whether a people's social sense be the direst superstition or the purest science, to disbelieve it, to oppose it, always meets with the same opposition, the same punishment, only to-day the skeptic, the revolutionist, the reformer meets with his punishment according to accepted laws and is either martyred or ostracized, depending upon whether his offence is against the moral or the social sense. If ostracized, he is compelled to exist in silence, unknown, misunderstood, with charges of insanity and immorality for his highest manifestations of intellectuality, his truest art and purest morals. If martyred, depend upon it, he often goes down in history as a criminal; class society justifies itself to-day.

It is by the work of specialized individuals that the social sense is developed. They make discoveries, make inventions, originate new philosophies, invent new ideas, make true syntheses of nature, life, mind, society, write great poems, paint great pictures—do any and all kinds of original work not in harmony with the social sense of the race. Then they begin a conflict with the existing social sense, and if the new knowledge conserves the energies of human beings more economically than the old, after much conflict the new product is adopted as the social sense of that nation

or race; but very often the specialized individual pays with his life the price of being a social being, one of the saviors of humanity. Such was Bruno and Lincoln and countless others buried in obloquy and oblivion by a thankless race. It seems great injustice that Shakespeare should be so little appreciated in his own age, but when the great innovation he made in human knowledge is considered there is little wonder from our point of view. Michael Angelo, despite his wonderful originality, only gained recognition by the ruse of burying one of his statues and having it dug up and pronounced a marvel of antiquity, then proving that it was his own production.

But this persistent conservatism has been of incalculable benefit to the race in stopping unwarranted variations from the type in both social sense and moral sense. The race must protect itself from false variations that would lead it farther and farther away from adaptations to its environment, hence the price of originality is hardship, privation, sacrifice, and even death. The primitive race could not have existed at all if there had been the right of individual opinion then that we have to-day, let alone what we may have in a more advanced age. Of necessity among savages all must believe alike, think alike, act alike, live alike. How sedulously is conformity to public opinion even to-day enforced by every one! What is hooted at more vociferously than originality in any and all lines? How was Darwin's *Origin of Species* received, one of the most original books ever written? Or Schopenhauer's *The World as Will and Idea*, equally original? It has always been so, not only in one line, but in all. The social organism is primarily psychical. It is held together by beliefs, opinions, feelings, knowledge, ideals, hence to disobey the feelings, disbelieve the opinions, dispute the knowledge, burst the ideals, means destruction to society. The individual instinctively resents such a mental attitude and such anarchistic conduct. It is sacrilege. It is impiety.

It is blasphemy. Jesus was crucified for sacrilege; Socrates was forced to drink the hemlock for impiety. Bruno was burned at the stake for heresy. Yet the hope of the perfection of the human race depends upon its social sense being made more and more in accord with scientific truth, as the mind of the individual becomes more and more perfect and discovers it, so that in the end the race and the individual may be perfectly adjusted the one to the other, the object of all social reformers from time immemorial to the present date. The social sense is perfected chiefly by specialized individuals, geniuses, reformers, who usually give their lives for the betterment of the race, a kind of fructification of humanity.

IV

Christianity is the ostensible social sense of the vast majority of the people of western civilization to-day. It is through Christianity that the common man knows the race and the individual's rights and duties to the race. But Christianity as a social sense is deficient because the ruling classes do not seriously believe it. It is not based on facts, but an allegorical conception of the facts. Yet with all its faults Christianity is better than any other of the world philosophies, but it fails in our age, because it is not based on a naturalistic concept of nature, life, mind and society. Western civilization has outgrown Christianity just as it outgrew polytheism. The race has always concealed from the common people the real facts of its existence hidden beneath some myth or superstition, because man's first conception of things is allegorical, then scientific, and the leaders of men have always attempted to perpetuate the first misconception, not always with the best motives. Kings, statesmen, popes have ever pretended to believe in a world philosophy that they deny in almost every action. It was so in Greece. It was so in Rome. It is so with us to-day. The ruling

classes treat the masses as if they were children not old enough to be trusted with the secrets of social existence, as children are not trusted by parents with a knowledge of sex, until it is thrust upon them and they are ushered into a world totally unprepared for it. It has always been so. There has been much more conscious deception in foisting a false social sense upon the world by interested individuals and classes than scientists now reckon. There was no more divinity in the laws of Moses than in those of Solon, and the codifiers of these laws knew it. And the advocates of the doctrine of the divine right of kings are the ones who are most benefited by it.

Science is the true social sense. It alone can adjust the individual perfectly to society. It alone can expend all human energies along the lines of the most perfect economy. Science to-day is the social sense of the western world, but out of fear and deference to the beliefs and superstitions of the masses, the savants still pretend to believe in Christianity. Science has all the badges of a social sense. It is held sacred by those who believe it, and it will stimulate sacrifice as quickly. It will beget persecution as surely. If any one has the hardihood to make a real and sincere and an apparently good contest of the principles of science, he will meet with the same intolerance, the same unconscionableness as if he were contesting a gross superstition universally believed in by a people. But there will be good taste, much refinement and culture shown in the persecution.*

*A new scientific idea is rarely imposed so far at least as the majority of minds are concerned by demonstration. It must not be supposed that because a man cultivates science that he is released from the yoke of established dogma. Scientific dogmas are the most tyrannical of all. The scientific idea is predominately imposed by the prestige of the man who imposes it, and rarely in any other way. It might be objected to this that Darwin, who was without title, claim or authority, had no prestige when he made his investigation. But it would be easy to answer, first, that his example is almost unique; and second, that Darwin's doctrine was supported in England as soon as it appeared, by men who had much prestige. I am not, however, sure if Darwin had been born in some one of the countries where mental worth is exclusively measured

The ultimate social sense of the race will be verifiable, public, corporate, scientific truth. The science of to-day as a social sense will be little less transitory than the unverifiable knowledge of tradition and history. The social sense changes as man develops. It is no more durable in proportion to the intellectual development of the race to-day than the mythological and theological social sense of former ages. The social sense is constantly changing. It is different in different peoples, yet, the race over, there are certain fundamental likenesses in the different social senses, and the time will come when the social sense, the race over, will be the same verifiable, public, corporate, scientific truth. But to-day the social sense among all peoples, and certainly amongst ourselves here in the United States, is in a chaotic state, unorganized, illogical, comprising knowledge extending from the grossest superstition to the most advanced and verifiable truth. This is the chief cause of the anarchy and other extreme forms of revolutionary outbreaks. Our youth are taught just enough about the social organization to take advantage of it, the masses just enough to be taken advantage of by designing individuals. The social sense will never be perfectly scientific until all scientists have the moral courage to speak in scientific language against the rank ignorance and the gross superstition inherited from the past, and destroy the individualistic institutions founded on them and the general ignorance of the public.

V

Knowledge is to society what ideas are to the individual. Ideas originate knowledge the same as physical energies originate ideas. Through ideas the individual expends his

by the number of decorations it wears, the immortal book, *The Origin of Species*, would never have found a reader. The author would have been made to understand that not being an academician or professor, he could only make himself ridiculous by taking up questions that had been long tested by the most illustrious specialists.—M. GUSTAVE LE BON, *Appleton's Popular Science Monthly*, Dec., 1897, p. 252.

energies; through knowledge society expends its energy. The motor power of the individual is the liberated energies of the organism due to chemical decomposition but guided by ideas; the motor power of society is feeling and emotions guided by scientific knowledge, the social sense. Feelings and emotions are energies, and when conveyed from one individual to another by language, move society as a physical energy would move the individual. An idea is a channel through which an animal can expend its energies. Knowledge in society (the social sense) is a channel through which society can expend its energies. The intellect is a representation of nature; the social sense is a representation of society. Or differently put: The social sense is the registered experience of the individuals of the race in executing their ideas in society and stored in language and institution and registered in the mind of the individual by education and experience with society. Continuous expenditure of feelings and emotions in society naturally leaves residua of themselves in the individual, which become a social sense for the subsequent cognition, registration and subsequent regulation of individual energies in their expenditure in society as controlled by individual ideas. This is the sense of social consciousness. Social consciousness does not mean that society is conscious of the individual, but that the individual is conscious of society. To-day the individual at most is but conscious of his particular class; he should be conscious of the race as a whole, and make it his class, know the structure and functions of society as a whole, and perform his functions in society intelligently and morally.

The moral sense controls the individual instinctively; the social sense when perfect will control him knowingly. The moral sense develops an institution blindly; the social sense designs one, plans one, scientifically. It is the race's conscious development of itself. As the individual consciously educates himself, consciously develops character by self-

discipline, so can society artificially devise institutions to conserve human energy, to expend it in a perfectly economic manner, ending in a perfect state, a perfect system of education, a fine art that make all of life beautiful, and a religion that is a reaction from morality, which really and truly will save humanity.

Consciousness in the mind does not mean that the whole mind is conscious of an impression of some object, but that the residua of some class of objects is conscious of another impression of an individual of the same class, let it be self or some external object. Social consciousness is the individual's knowledge of society's method of regulating the expenditure of individual energies, as controlled by ideas registered in the human brain, cognizing a new impression of society's acting and regulating the ensuing action by that consciousness in opposition to the individual's nature. Social consciousness is the individual's consciousness that society regulates his feelings and emotions by knowledge organized into institutions, ideals and laws. The social sense is the eye of society. The moral sense is the sense of touch of society. The social sense sees the way all human energy, feelings and emotions should be expended; the moral sense feels the way all human energy, feelings and emotions should be expended. The reason the race is so impotent to-day in the control of the individual is on account of the imperfect development of the moral and social senses in originating and evolving perfect forms of expenditure of feelings and emotions, knowledge, institutions, ideals and laws, in opposition to the expenditure of individual energy controlled by individual ideas.

The individual by experience and education can in the end expend his energies through his ideas perfectly from the point of view of the individual though may be in opposition to the form of expenditure imposed by society. Now if the social sense was even as perfect as the individual's intellect,

there would be no social problem before us. But individuals in the expenditure of their feelings and emotions to-day have no social sense to adjust them to society now developed, such as corresponds to the individual's intellect to adjust him to nature; instead they have our inherited erroneous knowledge and naturally grown institutions to regulate human feelings and emotions, and as a result social life is not organic, not perfectly coöperative, not up to its maximum economy in the expenditure of energy. The social organization instead of being an organization of all the units, by all the units, for all the units, is an organization of all the units for the benefit of a few. The energies of society are wasted in competition, the struggle for existence, war, or used by the few at the expense of the many. Really the waste we see in society now is almost as great as it was in nature before the origination of life and mind. Individuals use society as a whole, and nations oppose each other instead of rendering service for service. Nations accumulate vast quantities of energy, only to waste it in useless opposition. Think of twelve million soldiers in Europe for the purpose of national opposition! Human energy is not made to follow the line of the least resistance, but is dissipated by opposition and resistance. The accepted social sense of the race (Christianity) does not point the way. It is effete, and science is not properly distributed over the race. Nowhere do we find institutions fitted to regulate the energy of the contending human beings. This is not only true in one department of life, but all.

After centuries of the law of repetition and the law of natural selection, we have our present wasteful commercial laws. Could there be anything controlled more manifestly by blind feelings and emotions than our laws of trade? The law of supply and demand is interfered with by tariff laws, but only for the benefit of the few. There is no coöperation, coördination and statistical estimate of the products of the

race for society as a whole. Some of our large trusts no doubt regulate the output, but it is for their own especial benefit. Everything is done blindly so far as society is concerned. Taxes cannot be levied and let the people know they pay them; they must be levied by tariffs. Despite our boasted social sense of Christianity, everything is done blindly, almost as blindly as nature in its unconscious process throughout inorganic and organic nature before the origination of man. Either society will adopt verifiable science as a social sense and consciously develop a moral sense by punishment and reward, by discipline, instead of leaving morality to an imaginary God, and develop a social sense by a scientific system of education, or else western civilization is destined to go the way of Greece and Rome and all the nations of antiquity.

In the struggle for existence between tribe and tribe in the development of humanity that tribe or nation survived which followed most closely the forms of expending energy handed down from the past, as determined by the internal law of repetition; hence that tribe survived which was the most severe in its discipline of the individual when he varied the expenditure of his energies from the tribal form. As a result, among primitive peoples, we have caste, invariable customs, rigid moral and social senses. Progress was impossible. On the other hand, according to the law of external repetition, that tribe which adopted variations in the tribal forms, customs, introduced by specialized individuals and more successfully adjusting the tribe to its environment, not only survived, but became the dominant tribe, or nation, on that part of the earth. And as a result, after centuries of evolution, we have progress and will ultimately have a verifiable social sense.

In general the moral sense has to do with order, the social sense with progress, but owing to the imperfect development of each, the differentiation in function is not perfect.

There has ever been a conflict between the law of internal repetition, which kept the tribe as it was, and the law of external repetition, which varied the tribe to adjust it to the environment. The conflict between tribe and tribe, nation and nation, race and race, is settled in the struggle for existence between the moral and social senses of the contestants, that social organization surviving which has the moral and social senses most highly developed and which expends its energy in the most economic manner possible. Those nations have succeeded in nature which have had the law of internal repetition, resulting in order, the most nearly adjusted to the law of external repetition, resulting in progress. And it will be so to-day with the nations of the twentieth century in their great conflict for the world supremacy. That nation which has its party of progress coördinated with its party of order so the social organism will be a moving equilibrium is destined to be the nation which will organize the entire human race into a social organism.

VI

The name social sense to many will be a misnomer; yet the individual knows the social organism through social knowledge, the inherited knowledge of the race, exactly the same as he knows nature through his senses and intellect. The individual does not know society through his senses and intellect, but through his social sense, knowledge, institutions, laws, ideals and customs. If the individual has no social sense, and is so placed that he cannot acquire one, he is shut out from all knowledge of civilization, and despite his senses and intellect is a savage. The social organism does not exist for the savage, despite his acute senses and cunning intellect. It does not exist for any one but the oriented person who has a naturalistic conception of nature, life, mind and society. A person who believes in Christianity really does not know anything about the social organism and his

relation to it. His knowledge is all symbolical. He sees through a glass darkly. One of the chief causes of criminality is deficiency not only in moral sense, but also in social sense and not alone in the common criminal but in the exploiters and oppressors and class rulers of humanity, who use society as a whole for their own benefit and thus bring degeneracy upon themselves and extinction to society as a whole. They crucify the race and do not know it, because they have no social sense.

The trouble with the social sense of to-day (Christianity) is that it not only fails in registering true impressions of society, but in directing the expenditure of individual energies in society economically by furnishing scientific, verifiable ideas, because it is hundreds of years behind the most advanced individuals in knowledge, thus being so impotent that it permits one individual or class of individuals to control the whole of society for their own individual benefit and contrary to the best interests of society as a whole. Most of the evil done to the race by powerful individuals, corporations and classes is done owing to general ignorance, the imperfect condition of the social sense (Christianity). The common man really knows nothing about society. He thinks God runs it. That society is a social organism run by social laws is undreamed of by him. Social imperfections can pass unnoticed for he does not concern himself about them. It is God's business to remedy them. The individual's allegorical conception of nature, life, mind and society blinds him to his real functions in society. Christianity preserves order, but it can never promote progress.

When one contemplates the hideousness of modern civilization (poverty, the struggle for existence, and war) and examines the reasons and causes for it, one is profoundly affected by the inefficiency and inadequacy of Christianity. Our religion and morality are inherited from a tribal morality and religion that was well enough suited to control humanity

in its earlier forms of tribes and nations, but both are manifestly inadequate to control the vast associations of humanity to-day in western civilization. Man's moral and religious progress has not kept pace with his political and intellectual advancement. As a result, we have a vast civilization controlled by a morality and a religion only competent to govern humanity in clans, tribes and nations. There must be a widening of man's moral sense, an intellectualization of his religion, to correspond to his vast social organization, else western civilization will break up for want of internal cohesive force, and the race will revert to tribal life again or suffer another Dark Ages.

In western civilization the time has come when all that can be done has been accomplished by individuals and classes performing social functions for individual or class benefit directly, and social benefit indirectly. For example, the management of the finances of the various nations to-day by individual financiers. And, if the various nations are not intellectually and morally competent to perform social functions directly beneficial to society and indirectly beneficial to individuals and classes, then internal dissension will result in the overthrow of western civilization as external opposition destroyed the great civilization of Rome. Western civilization is trembling in the balance of forces which may end in its destruction or, if properly adjusted by moral and social senses, may lead to a system of human association governed by intelligence and sustained by a religion based on facts. This is no idle alarm. On every hand, the pulpit, the press, the platform, the theater, and even in staid scientific works, do we see evidences of this foreboding situation.

The future organization of the race must be achieved in the light of present knowledge, for our inherited knowledge, Christianity, has proved futile; it but hinders the work now instead of helping it. The force of habit and custom, the inertia of practice, make almost all of the moral and

religious teachers follow blindly and conservatively the orthodox remedies for the salvation of the race, no matter their infinite number of failures and the utter inadequacy of practical results. It is not Rome or reason; but it is science or racial retrogression, if not extinction.

The world is halting for want of scientific knowledge uniformly destributed throughout society. Does any one really suppose that the gigantic evils of commercialism, imperialism and monopoly would be tolerated for a moment if the people knew the causes and consequences of these evils?—knew that the only way society can reach perfection is by the conscious efforts of its individuals?—knew that God is but an allegory of society and it is the reality that must act now and not the substitute? Or, if the people knew how to coöperate so that all the energies of society could be expended for each and every member of society, would they permit the dire waste we see in competition and the struggle for existence? If the principles of science were the common property of all mankind, institutions would be originated that would result in the democratization and socialization of the whole race speedily and inevitably. Would the common people support great nobilities, if they knew anything about the naturalistic conception of things? And would any nobility want to be pseudo-noble, if it for a moment knew what a mistaken conception of real happiness it possessed? Certainly not. All of these evils exist on account of an imperfect social sense. It is true men are pitted against one another in political partizanship: nevertheless, if our higher schools, colleges and universities would call a spade a spade and would show in specific language with illustrations the iniquities of class government, the inadequacy of Christianity, social democracy would soon be an assured thing. The press, the pulpit, the bar would be amenable to the newly-developed social sense and orientation and socialization would soon follow.

The function of the senses and the intellect is to adjust man to nature; the function of the social sense is to adjust him to society. The intellect consists of inherited mental structures due to experience with the energies of nature; the social sense consists of knowledge, of social processes, and institutions due to experience with human beings in society. In the case of the intellectual structure it is inherited within the animal organism; in the case of the social structure it is inherited without, but the social process, institutions and knowledge of society becomes organized within the human mind through education and experience in society, and creates the faculty of the social sense, which in apprehending and directing human energies in society performs the same functions that a physical sense does for the physical energies in nature.

VII

The conflict between man's individual nature and his social nature is a constant source of unhappiness. The energies of nature are invariably and universally present, hence the intellect of man is more uniformly developed than his moral and social senses. The social organization develops the social sense by subjecting the individual's nature to it, and this conflict is a great source of unhappiness to the individual until it is ultimately accomplished. Owing to humanity's imperfect development, only favored individuals are susceptible to perfect development, not the whole race by any means. That constant conflict going on in us, in which that which we would do we cannot do, and that which we do we would not do, is our individual natures opposing our social natures. It is individual vice being opposed by social virtue. It is the individual's ignorance leading to social crime. It is the individual's giving up his individual ways of expending his energies and adopting the ways suggested by society.

The social sense is representations of the energies of society, knowledge, experience of the race, stored in institutions, traditions, language, ideals, and as the individual has little of such experience, unless carefully educated in all of the sciences and arts, in comparison with his experience with nature (and we make no provisions for such experience in our system of education, owing to the usurpations of the professions, each preëmpting vast fields of knowledge for itself), the development of the social sense in the individual to-day is incipient and imperfect. The chief cause of immorality, intellectual anarchy, lack of solidarity, want of unity in the race to-day is the fact that society consciously attempts through education, the education of the church, to foist a dead social sense (Christianity) upon a living race, and neglects to teach the individual the true social sense as thought out by scientific men, being verifiable, scientific, public, corporate knowledge.

The thing that education should do is to teach one what nature is and how to live in it; what society is and how to adjust one's self to it. As the mind is a repetition of the energies with which it comes in contact, the first necessity of mental development is actual physical experience with the energies of nature to develop the senses and the intellect, and as the moral and social senses are a repetition of human energies with which they come in contact, the first condition of the development of the moral and social senses is actual experience with the energies of society to develop the moral and social senses. Our system of education is sadly inefficient, being based on traditional philosophy, when it should be based on nature and the functions of the senses and the intellect, and on society and the nature of the function of the individual in society. Thus education should be twofold: individual, enfolding, developing and drawing out the senses and the intellect, and secondly, social, developing the moral sense through discipline and the social sense through

instruction. To-day education has no philosophy, it exists from momentum acquired hundreds of years ago. It works blindly as among savages, and does not fit the individual either to live in nature or to live in society. This is the chief cause of the lack of coördination, lack of coöperation, solidarity and unity we see in the social organization to-day.

The conflict of our individual nature with our traditional social sense vitiates our system of education. Our system of education instead of imparting ideas to the student so he can understand nature, life, mind and society, really keeps him from understanding them. This is done purposely by the teachers of the traditional social sense for fear the novice will find out the fictitious nature of Christianity and contradict it, disobey it, subvert it with his individual nature. On account of this, much that passes for the materials of education in our higher learning stops thought instead of stimulating it—languages, pure mathematics, illogical, dry history, and trashy literature called classics. The mind must have facts, ideas, concepts, inspiration, enthusiasms, discipline, not tasks, examinations the goal of some degree. No professor could maintain his position for any time who taught his pupils how to think about nature, man and society; while the professor who teaches that in Christianity we have reached ultimate knowledge on all subjects, has a string of degrees using half of the letters of the alphabet, and a life job. The best education is an honest, candid, free search for truth, under the guidance of a teacher with the motto: "Prove all things and hold fast that which is good."

It certainly should be the main object of education to develop in our youth true moral and social senses by instruction and discipline, but in fact in our higher schools of learning, the development of the moral and social senses is left wholly to chance. One can graduate with the highest honors with never a day's study about society and with no more moral character than a prize-fighter. Our schools are

unorganized, unsystematized, being based upon the inherited theory of education unmodified by the science of to-day.

Every teacher in a university struggles with every other teacher to see which one can worry the student most with dry, hard tasks, exasperating examinations, brain-racking quizzes; that teacher being deemed the best who can produce the most dismay, despair and disaster. There is no attempt to develop character—that's left to God. The intellect and the moral and social nature of our youth are expected to grow and flower under such treatment. The courses of study in modern universities are made up of dead and foreign languages, pure mathematics, a smattering of physical science (usually taught by a theologian, so there will be no danger of the pupil getting too much science), a bit of trashy literature called classics, no fine art at all, and so much of sociology as is compatible with the ruling political ideas and theological creeds,—each course of study conflicting with every other course, there being no unity, no plan and no more system than one finds in the wishes and hopes of the youth's parents. Only by accident has the college graduate a better concept of life when he graduates than when he enters; for it is the avowed object of college training to hold persons in their childhood beliefs instead of making them original thinkers. It would ruin a college to have it said of it that it turned out men such as Darwin, Spencer, and Schopenhauer.

Education should be the artificial development of the senses and the intellect, and the artificial development of the moral and social senses, and the materials of education should be selected with this object in view. Above all a rigid discipline should be maintained to develop good habits and an irreproachable character, so that when our youth embarks upon life there will be some surety of their proving invincible to all temptations. Then society will be speedily perfected and our ideal of civilization realized.

The theory of education which places great stress upon what it calls mental training, such as one is supposed to get from studying Latin and Greek and pure mathematics, is based upon a wrong theory of the mind. Muscle to a large extent can be developed by one kind of exercise and used in another, but mind cannot; it consists of ideas and is developed by giving it ideas and experience. If the mind can be developed by other material than what constitutes it, why not have a boy who is studying Latin cram on Greek when he is about to be examined in Latin? It will strengthen his mind and he will come out with first honors, or ought to, if the theory be true. It is possible to-day to graduate from a modern university and yet not have any more ideas about nature, life, mind and society than an intelligent ten-year-old child. The modern college education is a travesty. Mind is developed by coming in contact with mind-producing energies, and by nothing else. Sight is developed by light, touch by contact, hearing by vibrations of the atmosphere, and intellect can be developed only by suggesting ideas to it, by experience in nature, knowledge contained in language, institutions and society. The moral and social senses do not grow by chance. They are developed by actual experience and, if not developed, do not exist. By the time a child is seven years old, it should have had developed in it by punishment and reward, by discipline, an acute moral sense. Every infringement of morality by a child should be carefully punished, not necessarily by physical methods, but by mental and moral; and every successful undertaking involving right living by a child should meet with certain reward, not necessarily physical, but mental and moral. The moral sense develops much earlier in life than the social sense. By the time a youth is twenty he should possess a perfect social sense, developed in him by systematic investigation of the phenomena of nature, life, mind and society. Education should consist in acquainting

the rising generation with ideas that will adjust it perfectly to nature, and concepts that will adapt it perfectly to the race. Education should be a fitting of the individual to live in nature and society, making him a self-adjusting unit in the social organism. This is the problem that confronts humanity to-day, and it will not be solved except by a naturalistic moral and social sense and the discarding forever of our supernatural notions of the moral and social senses. Our youth can be made intellectual and moral and social only by the most careful discipline and the freest education, based on a naturalistic psychology, a scientific sociology and a true philosophy of religion.

Another falsity in the current theory of education is that one's mental capacity is unlimited; that the brain can be filled with this mass of knowledge, then with that, then the other, and come out the more able to be filled again with still other forms of knowledge. A good mind may not be destroyed by such a system of education, for the best minds are the ones that forget all rubbish, but a common mind is ruined by being filled with rubbish in the form of many languages, abstract sciences, metaphysics and the current illogical knowledge of the race—the traditional social sense—Christianity. Leibnitz says: "So far from our mental powers being sharpened by excess of study, on the contrary, they are blunted." A great French writer said: The best education one can receive is to forget all one learns at college.

The only possible way really to know anything is to study the thing itself, let it be an object of nature, a function of the individual or an institution in society. I do not depreciate books, they are one of the greatest inventions of the race, but experience should interpret them and they interpret experience. Institutions should be studied in operation. Our education is vitiated by being devoid of a psychology, a sociology and a philosophy. Education should be chiefly social and not intellectual. The highly educated

individuals of society to-day are almost all of them philosophical anarchists. They are individualists. They are really criminals. Instead of first teaching a youth how to secure a physical competence, how to make a living in agriculture, commerce, manufacture, business, or at skilled or common labor, then to spend the rest of his time in moral and social education, the practical part of our highest education is devoted to the art of earning money through the professions, making wealth an end in itself, instead of a means to existence. The only stores which can be laid up with any certainty of proving a blessing to our offspring are improvement in the social organism—all other assistance to children more often incapacitates than helps them. The foolish social life of the aristocracy the world over will be replaced by intelligent service to the race. Woman is very competent to do religious work, especially in training the young, but the modern smart set society has diverted her from such work to a great extent. All of this is due to the fact that our life is materialism hedged in by an impotent and unbelievable theology. No wonder the perversions of life under such conditions, such a moral sense, such a social sense. As a result, despite our great intellectuality, society has scarcely any more power in controlling individuals now than in less advanced ages, and the civilized individual, with all of his marvelous resources, lives a life only a little above, only a degree larger, than the savage with his dire privations. While we have a high state of intellectuality in isolated individuals, yet, owing to our imperfect moral and social senses, our every-day life, taken from beginning to end, with its struggle for existence, its panics, its poverty, its insecurity, its war, is little better than savagery. Three of the great religions of the race, Brahminism, Buddhism and primitive Christianity, have taught asceticism, the denial of life, as the true way to live. The philosopher Schopenhauer has all but demonstrated pessimism, and it is the common belief of all that if

death ends all then life is not worth living. And if the teachings of Christianity are true, it would be better by far never to have been born than to run the risk of eternal damnation. Our situation here on earth from the popular point of view was given to me in such striking language by a laboring man, when I was a child of seven, that I remember it yet. He said: "It is live hard, work hard, die hard, and go to hell at last!"

That the life of society, the race, can be as fully appointed as the life of the individual, that the social organism can be developed with mutually dependent parts coördinated and unified, are concepts held by few but are possible of objectification as certain as the race shall exist another century. That the individual can derive as much happiness from his social nature as he now enjoys from his individual nature is a truth not dreamed of by the individualist, he believing that the painful conflict he is undergoing with society to-day is interminable. But just as love is not love until it is conquered, so the individual does not come into his full existence until he has been conquered by society.

To offer to teach religion in our schools would give rise to a cry of horror, for it would bring up in the minds of the people only a concept of sectarianism, yet the philosophy of religion is exactly what should be taught in our colleges and universities—religion stripped of superstition and based on facts. Nothing shows us more truly that our theological social sense has fallen into desuetude than the fact that religion is not seriously studied in our great institutions of learning. In our conscious efforts at developing morality and sociality, owing to our intellectual anarchy and hypocritical theology, lack of a verifiable social sense, we singularly let alone the teachings most essential to life in oriented society. There never has been a time, and there never will be a time, when humanity will ever be able to accomplish great social development except under religious

emotion, and with almost complete absence of religion from the lives of our leaders, thinkers, writers, statesmen and common people today, we proclaim that religion cannot be based on fictions that we know to be false, but must be based on a scientific social sense that we know to be the truth, then social perfection will speedily follow. Scientists avoid the study of religion because they know it is based on fictions and do not care to be disgraced by being called agnostics, infidels and atheists; and theologians avoid the study of religion because they see with very slight investigation that a belief in God and immortality will have to be given up and, thinking that these beliefs will carry with them religion itself, they center all of their powers on retaining a belief in God and the immortality of the soul, whether true or not. The result is the condition of affairs we see in western civilization to-day—intellectual anarchy, moral insanity and human misery.

The average person here in America, while much higher in development than the average European, is a being still nominally controlled by our traditional moral and social senses. His crude social concepts he picks up any place, and his inaccurate, erroneous and absurd intellectual concepts, and his ugly and commonplace notions of the beautiful, he finds in public opinion and tradition. His intellect is acute, cunning, fine, but his sense of the beautiful, moral and social is that of a savage. The crying need of the race to-day is to make religion the fundamental emotion of our life, as it has ever been in all ages of the race that have made an impression on the life of humanity. Religion to most scientists is an excrescence on the social organism to be gotten rid of in the course of future enlightenment; to the religious it is blind worship of the supernatural, devoid of intellectuality. The truth of the matter is, religion is an emotion that adumbrates man's chief social function, the protection, the perpetuation and perfection of the race by

conscious effort, and is an emotion that always follows from such effort and should not be a reaction to anything else.

In the face of all of this failure in education, in morality and sociality, I boldly proclaim the necessity of a scientific moral and social sense. The school must assume the functions of the church and supplement the home, and thereby fit the individual for socialization intellectually, morally and socially, and the life of society will be determined by prediction and calculation as a product of art or science. This will be living, not being afraid to live.

VIII

The chief difference between an uncivilized and a civilized man is a matter of social sense. Their intellects are equally acute. It took just as much intellect in the Stone Age to make an ax as it takes to-day to make a Gatling gun. Galton estimates that the Greeks were even superior to us of to-day; but this no doubt is one of those odd theories that scientific men allow themselves to entertain in order to amuse themselves by trying to prove, knowing all the time they are erroneous but original. The American is the most intellectual being ever on the face of the earth, and if not brought to destruction from lack of moral and social development, bids fair to outstrip all competitors as the race which will finally overrun the whole world. The chief difference in races that counts in evolution is a difference in moral and social sense and not a difference in intellectuality among individuals. The difference in intellectuality among individuals is the perfection that causes preferment among individuals in the universal process, but it is a difference in moral and social sense among tribes, nations and races that causes preferment in the social process. It has ever been the superior social sense that has the ability to spread throughout society, causing it to become organized, unified, which has always been adopted, regardless of the fact whether

or not it is the truth, and the nation adopting such a social sense has always triumphed over all rivals. And that nation to-day which has the ability to adopt verifiable, scientific truth for its social sense is certain to be the predominant nation in the immediate future, because science has the advantage over all other kinds of knowledge of being more nearly correct, and is thus more competent to adapt man to society and society to its environment than any other knowledge that the race has believed. In the present conflict of nation with nation, that nation is bound to conquer which has a social sense that will enable it to effect the most complete organization, an organization in which every member has his function to perform, coördinated in a natural or racial coöperation, and who is justly compensated for his labor. In such a society all energy will be expended in the most economic manner possible, and it will force all other nations to a similar coöperative expenditure of energy or exterminate them by absorption.

Whether a body of knowledge ever becomes a social sense or not depends upon its ability to spread throughout society, and whether or not scientific knowledge will ever become the social sense of the race depends upon the intellectual development of the individuals in control of the various nations to-day. The common man is incompetent to change his social sense except by assistance from society through education. It is true that the social sense of the race slowly metamorphoses from one form to another, and it is also true that the social sense can change radically by artificial, educational means, as we have seen several times in the history of the race. We may as well come to it first as last—the only solution of the social problem is a scientific social sense, and we may as well begin teaching it at once and drop out all of our effete subjects of study in our colleges and universities.

The perfect organization of the intellect is attained when external energies give a verifiable representation of nature,

and the social sense will be perfect when it gives a verifiable representation of human energies, feelings and emotions, a verifiable representation of the social organization and man's relation to it and society's relation to man, so that the individuals of society will know really what it is, are conscious of it, and then society can consciously, intentionally devise, invent institutions which will enable individuals to expend their energies so that none will be wasted—so that all of the energies of nature and of society will be expended with perfect economy. Whenever the social sense shall be a system of knowledge that accurately represents society as the intellect represents nature, determining the individual in his methods of living, and society's action as an organism, by correctly directing the expenditure of the energies of the individual into channels of the greatest economy, and the energies of social organization in all of its actions, thus adjusting it to the environment as a whole, then the socialization of the race will be perfect and the most economic form of expending energy on earth will have been attained in the most elaborate organization possible to be evolved from the factors of nature, matter and energy.

Christianity, the social sense of to-day, is a system of knowledge inherited from the effete knowledge of the past. The individual knows that much of it is false, that much of it is only symbolically true but, owing to deficient moral sense, it is allowed to stand in the way of the adoption of scientific knowledge of society in all of its relations and institutions. This is no idle criticism, but as sincere an indictment as ever seer made against his age and, if not heeded, the result will be as disastrous in its consequences as any other in history. Interested individuals, the plutocrats and the aristocrats, do not want the social organization perfect, for they live off its imperfections. What would become of the professions if the common man was intelligent enough to get along without them? With what consternation would the financiers of the

world receive a proposal to change the present individualistic system of money for one that would only conserve the good of society as a whole, providing the proposal was backed with a power great enough to accomplish the change? A panic is the weapon the privileged classes use to hold up the masses and make them deliver. The success of an institution, instead of proving it to be good, is often proof that it is bad. The test of the goodness or badness of an institution is the greatest happiness of the greatest number resulting from it, not its ability to exist. The social organization to-day instead of being for society as a whole is clearly for the benefit of the few. The greatest problem humanity every attempted to solve is to make the social organization serve the race as a whole, instead of a favored few. In the beginning the only possible way to effect a social organization was to allow individuals to effect it for their own especial benefit; but that this primitive and unjust system of social organization is the ultimate possibility of social organization is manifestly untrue, and the time will come when society will drop all forms of individualism and take up socialism in some form or other as the ultimate form of society.

Nature has no choice in means, and if economy cannot be effected in one way it can in another, and it never stops to deliberate, but adopts the most available way—so it was in the origination of social institutions. But whenever, in the development of nature, life, mind or society a first method has brought a structure up to where a more economic method can be introduced—for example, chemical compounds being able to initiate expenditure of energy according to mind; or individuals being able to expend energies in society by the moral sense—this has been done; and whenever society has reached a sufficiently high development, it will originate institutions that will expend all social energy from the point of view of society, and individualism will be a thing of history. Whenever in the history of the race the

moral and social senses become sufficiently strong to take charge of the social organization, they will do so. Then society will cease to be run for individual and class benefit—the privileged few—and be run for the social benefit of all, because the social expenditure of energy is the most economical possible to the elements and energies of nature, and will inevitably be adopted by the factors now at work in nature and society, despite all reactionary measures to prevent it. To contemplate the problem in this light shows what is yet to be done in the coming years.

The great trouble in the adjustment of the race's traditional institutions to its newly evolved concepts of to-day will be to preserve all the good there is in the old forms and yet adopt all of the good in the new concepts. As trees sometimes are improved by grafting, so must our new concepts be grafted on old institutions that are apparently absolutely useless. Little will be accomplished in a social way until man's morality is more highly developed by making religion a reactional emotion from everyday life rightly lived, instead of from inherited beliefs and meaningless ceremonies. To any one who can think at all, the proposition that the social organization should be for the good of all instead of a few is certainly beyond dispute, but when it comes to applying the concept specifically, then the common man, fearing that he will be personally injured in the radical change inaugurated, flies back to his traditional thought and ways of doing things and accepts present ills rather than undergo painful changes that can be avoided. But it will not always be so. There is a dynamic in human life strong enough to accomplish this great social evolution if it is rightly invoked—religion.

IX

That the function of the various sciences when coördinated and perfected is to frame institutions for the economical expenditure of human energy may be a new conception,

yet it is perfectly true. Science is the new social sense that the race has evolved which is to take the place of the effete social sense of tradition and history, and the sooner we see it the better it will be for the race. Just as Rome in the third century did not notice that polytheism was dead and that Christianity was the new living social sense, so to-day we do not see that Christianity is dead and the new science is the living social sense. It is well that such is the case, then the shock of the change can be avoided. It is like lifting the curtain and letting the light shine in where at first too much light would have been injurious. To take away Christianity to-day will not be shocking when the race sees it has a surer social sense in science. If science is not for the purpose of guiding human actions, what is it for? And if Christianity has not failed to expend the energies of our race in western civilization, what would be a failure? There must be a choice between science and theology, for they are in direct opposition, reconcile them as we may. The conflict between naturalistic science and supernatural theology will terminate with the destruction of theology. Science and theology are fundamentally different. There can be no harmony between them. They exclude each other. Either science or theology must go, and the Catholic church has always seen that science was its mortal enemy, and fought it accordingly for hundreds of years openly, to-day surreptitiously, but Protestantism has often played blindly into the hands of science. Cardinal Newman was right. It is either Rome or reason. And the sooner the people of western civilization see that inevitably science must take the place of our effete theological social sense the better it will be for us.

It is true that most institutions are a result of unconscious growth, but not all; in fact, the United States itself is due to conscious formation, besides at least half of our laws are statutory. Social life is just beginning to be conscious.

Heretofore it has been almost entirely instinctive. It has followed the law of repetition and the law of natural selection blindly, and follows them blindly to-day. The change that is sought to be introduced, and which will be introduced, is simply to follow the law of external repetition consciously, as we do in making mechanical inventions. That the social life of the future will be conscious is certainly within the purview of the scientific knowledge of to-day, and when the function of scientific knowledge is fully grasped then will it be organized, systematized, and be taught to our youth as a sacred social sense, instead of our effete system of knowledge to-day. With the law of repetition to guide our statesmen, there is every reason to believe that institutions will be invented which will realize the fondest hopes of our social prophets.

X

The method of action through verifiable, public, corporate knowledge open to the social organism to-day is to direct human energy into right channels by concepts under the control of verifiable, public, corporate knowledge. Ignorance will be considered a kind of crime, mistake a species of vice. Once more it will be heresy to advocate error; but he will be the greatest who adds to human knowledge. The most important thing in life will be what an individual feels, what he believes, what he thinks. When the social organism can direct action, control conduct, by knowledge, then every individual will have imparted to him concepts undreamed of now in his limited sphere, and the moral sense through discipline will become acute to actions and conduct that it is now insensible to. All energy not expended according to knowledge will be deemed wrong. Even a virtue not lived according to knowledge will be considered a vice. The moral sense, supplemented by the social sense, will still be the medium of communication in

society and will inflict punishment and bestow reward, but as dictated to by the social sense. The more nearly knowledge is distributed throughout society, the more nearly will the social organism be like the animal organism. A law of the animal organism now executes itself: When science becomes the adopted social sense of western civilization, conscience and duty will become so broad and so acute that the social organism will do likewise.

Conscience and duty will become so acute that they will do for society what the sense of touch does for the animal organism, and the time will come when the social sense, believed in by the individual, will be so perfect that it will adjust him to society as effectively as the individual's senses and intellect now adjust him to nature. The analogy between the animal organism and the social organism will sometime be complete.

The social sense supplements the moral sense by widening its scope, by making it self-acting, by making the punishment of discipline through conscience and the pleasure of reward through self-approbation within the individual, not by society through external punishment and external preferment. Shame, remorse and the stings of conscience come from unused concepts in one's mind put there by society, which ache for the energies that have been otherwise expended. Society will ultimately control the individual by making the reward of pleasure within the individual, not by society through external reward, but by self-approval, self-appreciation, self-aggrandizement, religious ecstasy; the feelings coming from duty consciously done, resulting from the expenditure of energy through the most economic concepts yet originated by society. The time will come when the moral sense will be so acute through discipline, sympathy, imagination, that the sufferings of one part of the social organism will be felt by the moral sense throughout society the same as by the sense of touch in the animal body now; a

hurt in one part of the organism is felt by the sense of touch throughout the body and is relieved by the intellect directing the expenditure of energy in the most economic channel possible, and when this is realized in society through the moral and social senses then Sôlon's concept of a perfect state will be realized—one in which a wrong makes those who are not injured just as indignant as those who are and thereby secures a remedy for evils that cannot fail. The time will come when the social sense will do for the social organism what the intellect does for the animal organism.

If the social sense were as highly developed as the moral sense, the social organism would soon be perfected, but unfortunately, while the greater portion of the people of western civilization would do what is right, owing to having an acute moral sense, they do not know how, owing to deficiency in a verifiable social sense. The good people of the world are peculiarly deficient in ideas with which to execute their goodness. They are incapable of organization except against changes in the social sense. They can organize to oppose a change in our traditional social sense, but are incapable of organizing to fight the evils that can only be destroyed by a scientific social sense; hence the evils of civilization—poverty, the struggle for existence, oppression, exploitation, war—find shelter and protection under Christianity. The good people of the world oppose, neutralize and waste one another's energies through ignorance, error and superstition. They accomplish nothing. It is owing to the imperfect condition of the social sense that the moral sense is still imperfect. The good people of the world are still insensible to poverty, the struggle for existence, war, so that they accept these tragedies as inevitable and thus become a party to the misdirection of the energies that produce them. "Thou shalt know," is no commandment in the creed of Christendom; yet knowledge is the way, the light, salvation. It is impossible for the moral sense to

reach anything like perfect development except through a scientific social sense. It is as impossible to avoid executing a law of the intellect as it is to keep a law of nature from acting. That twice two are four is as inevitably true as that the attraction between two bodies varies directly as the product of their masses, and inversely as the square of the distance between their centers of mass, the law of gravitation. And the law of the social sense is as inevitable as the laws of nature. Whatever society demands of the individual the individual does, no matter if its demands are antagonistic to the functions of the individual. If the social sense were verifiable knowledge, its demands being inevitable, a perfect civilization necessarily would follow. The only way to live in society and be perfectly happy and honorable is to be always ready and willing to sacrifice one's individuality for society whenever there is a conflict between individual rights and social rights. To yield self-interest to social-interest is the greatest virtue and is always compensated for by religious ecstasy.

XI

If the social sense cannot adapt all the individuals of society to society, then degeneration inevitably follows, first degeneracy of the unadapted individuals, then degeneracy of society as a whole, which results in racial extinction. History is replete with nations that have gone to pieces on account of moral and social degeneracy and this may be our fate, depending upon our ability to perfect a social sense which will furnish the individual with social concepts that will adapt him to society. There is nothing mysterious about this. It is simply working out the problems of human relations and disseminating the knowledge throughout society and having society as a whole control all individuals by it. The two questions are: Have we the morality to accomplish this? Have we the knowledge? Many will

answer Yes, and be the first to resent a scientific concept of society if it conflicts with inherited theological and political beliefs; others will say Yes, but be the first to object if scientific morals do not coincide with theological morals. All are willing to accept the truth if they can dictate the terms; but truth's terms are always unconditional. The entire civilized world would be perfectly willing to accept the naturalistic concept of things if you would or could leave them God and immortality—dear on account of their hallowed associations and supposed benefits flowing from them. We must prove all things and hold fast to that which is good, even if upon trial our choicest beliefs do not stand the test, and we are brought from heaven to earth, from immortality to mortality.

Mr. W. H. Hudson says: "Beghot once described as the sharpest of all pains the pain of a new and unwelcome idea. Often a fresh truth will bring us, not comfort, or a sense of satisfaction, but the reverse of these—doubt, misgiving, heart anguish, agony of mind. The peace and joy which we once found in an older order of thought may henceforth be ours no longer; while in the place of the philosophy of life which had grown rich and sacred to us through association, we may have to accept a new theory of the universe and man which for a time at least may seem chilly, bleak and depressing. In such a crisis as this—and few serious-minded men of our generation can hope to escape some mental upheaval attendant upon the progress of thought—we must nerve ourselves with the high doctrine of veracity: 'Let fact be fact, and life the thing it can,' first the truth as we learn it and then whatever of happiness or comfort may be gained from it for ourselves and others."—*Appleton's Popular Science Monthly*, June, 1898, pp. 199, 200.

Whenever the moral sense is humanity wide and the social sense is verifiable, scientific truth imparted to the entire race by a system of education based upon psychology, sociology

and philosophy, not history, tradition and theology, then the race will be oriented and democratized and will enter upon a conscious career and accomplish wonders undreamed of to-day, such as the control of climate, the origination of food from the elements, the creation of life, communication with other planets, the conscious organization of society, the perfection of the individual and the socialization of the entire race.

CHAPTER XII

THE SUPREME LAW OF ETHICS: THE EXPENDITURE OF ENERGY ACCORDING TO THE MORAL AND SOCIAL SENSES

I

There is no intrinsic goodness or badness in human energy, will, desire and emotion. Like all energy it is good or bad according as it passes through the proper channels, is controlled by proper ideals and institutions. The thunderbolt that strikes a person dead, if rightly guided, through telegraph wires, would have sent a message of love. And the will that murders, if rightly guided, through the moral and social senses, would have sacrificed itself for others. All evil in society, life and nature is but undirected, misdirected, wasted energy due to the imperfect development of nature and life or the infancy of the social organism and the ignorance of the individual.

The first condition of perfect morality is perfect knowledge, verifiable knowledge; for without verifiable knowledge scientific institutions cannot be originated. The most important condition of right conduct is right concepts; for it is impossible for human energy to expend itself rightly unless it has the proper avenues of expenditure, concepts being nothing more nor less than ways of expending human energy. And the only way to have right concepts universal is to make them the basis of our system of education and have corporate society teach them to the rising generation.

The second condition of perfect morality is to have society invariably enforce its laws, concepts of right and wrong;

such enforcement being the necessary discipline to develop the individual's moral sense. The truth back of all punishment is that it is the negative way of developing the moral sense, as reward is the positive way. It is the experience of punishment and reward that teaches the individual right from wrong, develops the moral sense; it is experience in expending energy according to right concepts, knowledge, ideals, that teaches individuals truth from error, that develops the social sense, the two necessary conditions of right conduct in society.

If knowledge makes the individual responsible to the race and if knowledge makes the race responsible to the individual, which is the truth, then not to know is the cardinal sin in the supreme law of ethics. Ignorance is no better defense in morality than in law. Shakespeare is right, there is no sin but ignorance. Genesis is right, knowledge gave birth to right and wrong. Right is the line of the least resistance in the expenditure of human energy from the point of society, and human energy like all energy always follows the line of the least resistance when known. And the true Bible, the authority in the disputes about right and wrong, is the facts of nature and society as we find them, and that is truth which corresponds to these facts and satisfies the equation of mind with nature. Truth is the verification of a mental representation with its external cause.

The supreme law of ethics is to expend all energy through the moral and social senses, through a moral sense that is a perfect representation of the race from the point of view of feeling, sympathy, sensibility, through a social sense that is a perfect repetition of the race from the point of view of knowledge; thus the individual has within himself the supreme law of ethics, so that all energy, both public and private, can be expended along the line of the least resistance, the greatest economy.

It is folly to say that persons will not do right when they

know right, know that right is the most economic way of expending energy. In the struggle for existence nations vying with one another always adopt any improvement in the expenditure of energy that puts them in the van in competition. Hence, inevitably, that nation which adopts the supreme law of ethics in the expenditure of its energy will not only survive itself but will force the nations of the world to its system of living or else exterminate them. America is leading the western civilization to-day on account of its intelligence, and whatever nation adopts the supreme law of ethics will certainly be the ultimate world-power of the race.

The apparent perversity to do wrong, regardless of a knowledge of right and wrong, that is seen among individuals to-day comes from the fact that the individual has found out from his own experience that the prevalent conceptions of right and wrong taught by Christianity are not the most and least economic ways of expending energy, that they are in fact untruthful, unscientific, inaccurate. As a result, the individual does not follow them. He sees their falsity, but he does not see that the theological social sense is an allegorical interpretation of the facts. He takes it literally and rebels against society. It is impossible to adjust such individuals into an organization of mutually dependent parts with mutually coöperative functions. This is the condition of western civilization to-day. As a result, most of the energy of society to-day is wasted in rank individualism, crime, oppression and the struggle for existence. There will be vice, sin, crime, oppression, the struggle for existence, so long as arbitrary, allegorical, unverifiable, untruthful concepts are taught as right and wrong, because strong individuals will not follow them, will live and die independent of society, wasting their energies in opposition and neutralization, regardless of social control. As no one who has learned to know that $7 + 6 = 13$ will ever after agree to let them equal 11, so no one, individual or nation, who

once learns the right methods of expending human energy will ever lapse into the wrong methods again; for the right method of the expenditure of human energy invariably secures happiness and advancement, whereas the wrong method invariably results in pain and retrogression. But so long as society itself does not know right from wrong, the most and least economic ways of expending human energy from the point of view of society, just so long will strong and powerful individuals be perverse in obeying society, and civilization will be for the few and supported by the many.

II

There is not a system of morality or sociocracy extant that does not still maintain the distinctions between good and evil as intrinsic states; none show the true relation of the individual to society, and the true method of combating the bad, that is, unsocial methods of expending human energies by the method of expenditure through the moral and social senses, conscience and duty, and public corporate knowledge. That good and evil are purely relative terms humanity at large does not see, and that the energies producing the greatest evil, if directed by the moral and social senses, would end in good, is a concept beyond the common man's ken, yet one surely true and consonant with the principles of the supreme law of ethics.

That man's individual nature unsubdued by his social nature is the source of the myth of the devil or evil, that his triumphant social nature is the source of the myth of a supernatural God or good, are the facts behind the symbolism of Christianity, and what all should know and have the courage to teach is the profound truth that an analysis of civilization demonstrates and the supreme law of ethics sanctions.

We have reached a stage in human evolution when persons understanding the truth are in duty bound to impart it to their fellows. The common man is amply intelligent

enough to discard the allegorical method of understanding nature and society and be intrusted with the plain facts as they are, at last to be initiated into life in the highest phase of existence—socialization. Tell the truth to the rising generation. Don't destroy its young mind by feeding its craving for knowledge with antiquated myths. Tell it the truth. What insight into nature, life, mind and society may the rising generation not get, if at first, before thinking out a true theory of things, it does not have to get rid of a false one taught it by fond and foolish parents, interested individuals and superstitious priests. Don't betray a child by telling it a known falsehood when you know the truth. Such moral culpability is inexcusable to-day. It is in our childhood that our false and effete social sense is taught us, for most persons have their social senses grounded by the time they are ten and perfected by the time they are twenty. A naturalistic theory of things is more easily understood by a child than a supernatural one, for it need not be understood all at once. A naturalistic theory of things keeps one thinking until one does understand it, whereas the great fault with supernaturalism as a social sense is that by accepting it further investigation is stopped.

III

The function of the social sense is to regulate the virtues as well as the vices of the individual, to bring about that equilibrium of individual and social function which precludes conflict, waste of energy, and results in a social organism that is paralleled in the equilibrium of nature and the functions of the intellect brought about by the intellect, which we call life. As the individual starts out opposing nature and ends by controlling it, so the race starts out opposing the individual and ends by controlling him. The conflict in each case is one of adjustment, the energies of the individuals adjusting themselves to the energies of nature, and

the energies of the race, the combined energies of all individuals, adjusting the energies of each and every individual to the race as a whole.

Or, differently put: The human race before the origination of society is paralleled by nature before the origination of life. Nature was a conglomeration of different elements, compounds and organisms, conditioned by antagonistic physical energies; the race was a conglomeration of different individuals, families, clans and tribes, conditioned by antagonistic psychical and sociological energies, human feelings, emotions and ideas; and as nature developed the individual by registering in him its energies, thus creating the senses and the intellect, so that in time he could not only direct his own energies into the channels of the greatest economy from his own point of view, but also direct the energies of nature, so the human race, consisting of a conglomeration of individuals, families, clans and tribes, furnished another set of energies, psychical and sociological energies, feelings, emotions and ideas, which in expending themselves in society registered themselves in the individual, creating in him the moral and social senses, so that the race could direct the energies of the individual into the channels of the greatest economy, not only conserving the energies of the individual as such, but the combined energies of society as an organism.

Thus the individual is a being with two natures. First, an individual, who is acted upon by the energies of nature, producing in him the senses, the intellect and the emotions with the function of controlling nature through the senses and the intellect; secondly, the individual is a being acted upon by psychical and sociological energies, human feelings, emotions and ideas, which in registering themselves in him create the moral and social senses, through which the social organism controls the expenditure of individual energy and itself as an organism. As the individual is guided in nature

in the expenditure of his energies by his physical senses and intellect, so is he guided in society in the expenditure of his psychical and sociological energies through his moral and social senses. And, as the individual controls the wasting energies of nature, directing them to individual advantage, so society controls the wasting energies of the individual, directing them to social advantage—really the greatest individual advantage. And thus all the energies of nature subserve one purpose, the welfare of the human race determined by itself as a corporate organism guided by the moral and social senses.

IV

The individual takes advantage of nature by inventing machines that control, direct and use the energies of nature. The race controls the individual by inventing institutions sacred and secular, by the slow process of instinct, or by the conscious process of knowledge, that control, direct and use the energies of the individual. The law of repetition is ever acting in the inventions of the individual, the law of internal repetition always repeating the invention as it is, the law of external repetition is ever changing it, adapting it to the environment. All of our wonderful machines are due to the accumulated improvements, each generation adding its increment. Starting with steam lifting the teapot lid, we have the locomotive and the steamship; starting with amber lifting the pith-ball, we have the telephone, telegraph and the electric car. By the law of internal repetition the internal energies repeat the old form, while external energies in the form of ideas are repeated and registered in the old form, which change it, showing the improvements of each age; and these acquired increments are repeated until we have the final perfected invention. And in society the law of internal repetition is ever repeating the institution, the law of external repetition is ever varying the institution to

adapt it to its social environment. Take, for example, the jury system, or the house of representatives, or the church.

If written from a naturalistic point of view, what a wonderful production a history of the church would be! The nomadic Jew, the fanatical Arab, the philosophical Greek, the institution-producing Roman, the liberty-loving Saxon, all contributed a part by repeating in the original nucleus the energies of their respective environments. The Decalogue, the Golden Rule, the Logos, ecclesiastical institutions, the right of worshipping God according to the dictates of one's own conscience, self-government, God and immortality of the soul, free speech and free press, all came from diverse races and were originated in different ages. The church of to-day is a result of the working of the ages of the law of repetition. Starting with the monotheism of the Jew, all the rest of theology has been repeated in it from the environment by the law of external repetition; while the law of internal repetition has preserved all the good, until to-day, instead of believing in the allegorical interpretation of nature, life, mind and society, we interpret the facts in terms of matter and energy, and show a synthesis of nature compassing everything from a naturalistic point of view.

The law of internal repetition repeats the institution as it is; the law of external repetition registers in it the energies of the environment, sometimes by direct imitation of tribe or nation, most often by the teaching of some specialized individual. In the future it will be by education. In society internal repetition is custom, tradition, law; external repetition is the energies of the environment, feelings, emotions, ideas, brought to bear upon the tribe or nation by some powerful individual, an Aristotle, a Francis Bacon, whom society imitates, or repeats in itself, his feelings, emotions or thoughts which result in change, development. Or the imitation is from other tribes or nations, as all the world is imitating America to-day. That nation which

changes by expending its energies in the most economical manner is the one that succeeds in living and perpetuating itself in the struggle for existence between tribe and tribe or nation and nation. The conservative nation fails of adjustment to the environment and becomes extinct: Spain, for example, among moderns, and all the nations of antiquity, among the ancients.

There are two factors in all repetition, a body and the energies acting upon it and repeating and registering themselves in it. These energies can be the physical energies of nature or the psychical and sociological energies of society, and the bodies may be the physical bodies of individuals or the psychical and sociological bodies of tribes, nations or the whole race, and the resulting phenomena are the same in kind, but different in degree of development. The energies of the body repeat the body, except the variations left in it, by the repetitions registered in it by the external energies. If the body be a tribe, then it repeats itself from age to age except for the energies it comes in contact with in the shape of original ideas of individuals, who teach their ideas to the tribe, usually through that form of the law of repetition called imitation. Or tribes may become developed by coming in contact with other nations more advanced than they are, as we see to-day in civilization from the extreme savage to the semi-civilized of the orient, with the civilized of the occident, and in that case, as in the example of Japan, we see a nation imitating another civilization and changing in the space of a half century more than some nations change naturally in twenty centuries. This shows us what western civilization will do when it adopts the naturalistic concept of things. The whole race often has been modified by some one individual in it through imitation—a Socrates, a Plato, a Luther. Think of the changes that have modified the traditional concept of the state by the repetition in it of the ideas of the French philosophers of the eighteenth century!

The science of the nineteenth century has undergone almost a complete metamorphosis by having had repeated in it the ideas of Charles Darwin. August Comte has more ideas current in the western race to-day than any other man of his century, Charles Darwin not excepted, but he doesn't get credit for it. What will the state of the future be when it has had fully repeated in it the sociality of the science of to-day? What will the church be when it has had repeated in it the facts of science? Is not the school to-day a metamorphosed form of the church? Whatever each may become, the old state, the old church will each preserve all its good, but will be modified and be more perfectly adjusted to its environment. Nothing that is good, that is true, that is beautiful, that is organic, is ever lost. And no matter the advertisement or the amount of force that is used, no matter its tremendous success, all fiction is destined inevitably to disappear.

V

The conflict of the individual with society is of two kinds. On the one hand, it is carried on by specialized individuals whose function is to develop and perfect society by developing the moral and social senses; on the other, the conflict is between society and the rank individualist who will not be subdued by society, who persists in expending his energies by his intellect in as wasteful a manner as he sees fit so it benefits himself. Civilization is full of such people to-day. They are powerful individuals, they head corporations, they compose the professions, they constitute the classes. They believe in society for their own benefit and hoot at the socialization of the race as the rankest nonsense. They do much good blindly, wastefully. Their worst representative is the degenerate and criminal, individuals who cannot adapt themselves at all to the development of society to-day. Each class is condemned alike by the supreme law

of ethics, and, strange as it may be, yet each class was represented at the crucifixion of Jesus—Jesus the specialized individual, the thieves on either side the degenerate individualists.

The moral sense like everything else in society is initiated by the individual, is taken up by the few, spreads to the many, and is finally the heritage of all. The moral and social senses are developed in society by specialized individuals more enlightened than existing society, who force society to their standard, often by dying a martyr's death, as did Socrates, Jesus, Bruno, or by suffering ignominies as did Copernicus, Galileo, Darwin and Comte.

A highly moral individual will no more obey a barbarous society than a highly civilized society will tolerate a barbarous individual. The specialized individual will be either a reformer or a martyr. The trouble with society to-day is that it is ages behind its most advanced individuals in its system of morality and sociality, in its moral and social senses; hence the conflict of highly religious individuals in trying to reform and perfect society, so that highly intellectual individuals, the individualists cannot use and abuse it. Whenever society can convince the individual that it can control him perfectly, then individual and social coöperation will be secured. Just as the martyr dies for his convictions because he feels it to be his duty, so will the common citizen die or do his duty when a naturalistic moral and social sense is attained by society; for then the moral and social senses will be part of the individual, and to perfect society through them will always result in religious ecstasy.

The social sense may become so highly developed in oriented individuals that rather than disbooy it they will suffer death. There is no fact upon which the permanency of the race depends more than upon the loyalty of great souls to the truth; hence in specialized individuals the love of truth is so strong that rather than betray it they suffer

martyrdom. This love and loyalty to race-producing, race-maintaining, and race-perfecting virtues has many forms. The love of fame, both present and posthumous, is an emotion in great individuals so strong that it often causes sacrifices which end in death, and always tramples on individual feelings and emotions. All the virtues are more or less injurious to the individual functions of the animal organism, and some of them, if carried to the extreme, would mean extinction of race, as all vices and tragedies are injurious to the functions of the social organism, and if carried to an extreme would end in degeneration, decay and destruction of society. If the virtues are carried to the extreme, they destroy the individual; for example, chastity would stop procreation, charity would stop the production of wealth, and loving-kindness would destroy all discipline; if the vices and tragedies are carried to the extreme, they destroy the race; for example, theft would destroy the production of property, falsehood would destroy all the confidence of man in man, and the struggle for existence would reduce the individual to so low a plane that civilization above its lowest forms as life to-day would be an impossibility. But the race is so intent upon improving itself that the ill effects of the virtues upon the individual as an individual are never mentioned, and this ought to show us all that the tendency of things is always to race, and not individual, development. Or that individual development can best be secured through race development

The teaching of advanced specialized, oriented individuals in regard to the functions of the individual and the functions of society are always resented by the existing social organization as treason and sacrilege. Such individuals are always suppressed. They live and die for the race. They are the founders of religions, systems of philosophy and the fathers of nations. They are the discoverers and inventors of the race. The horrible facts of life create in the special-

ized individual the moral and social senses, which should exits in humanity as a whole, whereby humanity may rid itself of the evils that create the moral and social senses. But society is so conservative that it always resents all innovations; they must be tested, they must be tried, else the variation in the tribe may be too great and it deviate so far from the tribal form as to become extinct instead of better adapted to the environment, hence the test of truth by persecution and death; and what is found to stand the test is repeated in the race by imitation. Social evils create their own remedies. It is in this roundabout, indirect, blind, instinctive way that society corrects a wrong in itself. It is certainly a wonderful process. The evils of society create the moral and social senses in some specialized individual. Society martyrs him for trying to remedy its evils, and is convinced by his death that what he died for is the truth, and society adopts it and thereby reaches social perfection. All great doctrines have been promulgated in this way and are still so promulgated to-day. It is one of the anomalies and paradoxes of nature that these individuals specialized by the social organism for moral and social work are deemed by the community in which they live, by the class rulers of mankind, to be the least religious, the least moral, the least social and the least intelligent. Even to-day they are called cranks, criminals, infidels and anarchists. Socrates was forced to drink hemlock for corrupting youth; Jesus was crucified for sacrilege; Bruno was burned at the stake for heresy. It is horrible to contemplate. Can there be any argument produced by the mind of man to show more fully than this that there is no intelligence back of society, no morality back of it, but that the energies and elements of nature, working thus blindly, produce all the great civilization we see and hope for? This is the way improvements in society spread throughout society. The facts that should create an acute moral and social sense in all, create an acute moral

and social sense in these specialized individuals, and society by martyring them proves the trueness of their moral and social senses, then imitates them; thus the acute moral and social sense of the specialized individual becomes humanity wide. This is the natural way of creating the moral and social senses. It is blind, it is crude, but in the end it has succeeded. The law of external repetition repeated the horrible condition of the environment in the mind of the specialized individual, thereby creating in him an acute moral and social sense. Society, through its long experience with the law of internal repetition, repeats in itself only variations selected by the crucial experiment of death, having instinctively found that anything worth dying for is worth living for. So it kills the specialized individual, and his death proving the adaptability of his doctrine, society accepts it by the law of external repetition in the form of imitation. This instinctive process is wonderful, but it will be supplanted by the conscious process of education and discipline when society begins to live consciously, as it is to-day.

To-day, of all influences at work for religion, for morality, for society, those which orthodox theology fears most are the teachings of science. The orthodox church, to its shame, does not fear oppression, nor political corruption, nor moral degeneration, nor class strife, nor sheer individualism. But it does fear science. To be an outspoken scientist means to have no part in the affairs of men. It means to give up one's place in state institutions of learning, or institutions endowed by the capitalistic class.* To-day true scientists are specialized individuals in the social organism. If the history of the development of the moral and social senses could be given, it would be seen to consist of the epic struggles of specialized individuals in adapting the social organism to their concept of right and wrong, truth and error, through hate, persecu-

* *A History of the Warfare of Science with Theology*, by Dr. Andrew D. White. Vol. I, pp. 168-313-315.

tion, death; then reverence, imitation, then regeneration. This is a kind of sacrifice, and were the individual only an individual and not a social, a racial being, with a highly developed social nature, who takes great joy in such a life and in such a death, then his death would be a great injustice; but as it is, it is the only way the elements and energies of nature can create society, and consequently it has been adopted. In the future it will be different.

VI

Throughout history the moral sense has antagonized the development of the social sense, because the method of securing the right action through the moral sense is to have that one performed which is the line of expending energy according to present feeling, conscience and duty, whereas the method of the social sense is to have as many lines of action registered as possible so that human energy may take that line in its expenditure, not only of present experience, but the experience of all the past as registered in language and institutions. The conflict between the moral sense and the social sense is but the interminable conflict between the factors of order and the factors of progress. It is the fierce courtship of the internal energies of the social organism with the external energies in the environment, the marriage of which ends in the evolution of humanity, the equilibrium of the social organism. It is the highest example of the division of labor seen in all nature, the static moral sense preserving, the dynamic social sense developing, the social organism.

One of the most irretrievable examples of the struggle for existence in all history, one of the most shocking, is the struggle for existence between different forms of the social sense. Primitive man fought more bitterly over ideas than anything else. The world has been deluged in blood more than once in trying to determine which of two social senses

shall be supreme, and when in history we see such bloody wars over beliefs so nearly alike that they are almost indistinguishable, the wonder is great until its sociological significance is established by showing that in this crucial manner the primitive race selected and evolved its social sense. The conflict between the cross and the crescent is a conflict in social sense. The bitter struggle between Catholicism and Protestantism is another. The silent but none the less severe conflict between science and theology to-day is the last example of the struggle for existence of social sense with social sense in the long history of the race, and it will inevitably end in the extermination of theology.

The human race must be its own savior. It must work out its own salvation courageously, humanely, by the conscious expenditure of its energies. Civilization has grown as high as it possibly can grow by the blind battling of natural energies; either coöperation, coördination and socialization must follow, or deterioration, decay and death will result. Human energy must be consciously directed by the social sense before the democratization and socialization of the race can be realized.

When the social sense has reached a high stage of development, then the moral sense opposes any change in it. This is the conflict between the moral and social senses as is exemplified in the conflict between order and progress seen throughout history. The moral sense aims at proximate ends; the social sense at ultimate ends. The moral sense is similar to reflex action or instinct; the social sense to reason or intellect. The conflict between the moral and social senses is another example of the division of labor in the expenditure of energy in nature that resulted in the origination of sex and the creation of plants and animals. Generally speaking one-half of the energies of nature tend to order, the other half to change, progress. The manifestation of energy seen predominating in plants, in the female

sex and in order in society is gravitant, internal energy; while the predominant energy manifested in the active virile animal, the energetic, adventurous, liberty-loving male sex, and in change, innovation, evolution, progress in society, is radiant external energy. As a union of these two manifestations of energy always produced the best results in the lower organisms, the same is true of their manifestations in society. In perfect human society order and progress will be perfectly adjusted and thereby perfect adaptation of society to the environment will be secured. In originating the moral and social senses nature only extended its division of labor seen in the static plant and the dynamic animal, the static female sex and the dynamic male sex, to society, in which we see it manifested in the order-producing moral sense and the progress-producing social sense.

Again, the conflict between the moral and social senses is paralleled in the conflict in a low form of animal when its sense of touch conflicts with its sense of sight, the animal not sanctioning actions from sight, owing to the uncertainty from imperfection of vision. Or the conflict is paralleled in the individual who acts from instinct instead of reason. The social sense is a differentiation of and is supplemental to the moral sense, as sight is a differentiation of and is supplemental to the sense of touch in animals.

Actions guided by the moral sense alone result in benefits to society only on an average, and, if not corrected and guided by the social sense, often work injury. The moral sense alone never produced a high civilization; it is to the social sense that humanity owes its present high civilization. The conscience of a savage holds him as in a vise. He obeys the moral sense of his tribe implicitly, but the moral sense being blind and the social sense of the tribe being undeveloped, the life of the savage, despite his high moral sense, is very low. The moral sense holds the tribe together, but does not permit of development except by the law of natural

selection. The moral sense is static; to it society owes order, permanency of form. The social sense is dynamic; to it society owes progress.

No greater calamity has ever befallen a people than the administration of the affairs of men by the moral sense alone or a low form of social sense, as witness the history of the western world from the fifth to the fourteenth century. No progress, no discovery, no invention, no development; but on the other hand the origination of the most powerful organization yet known to man, the Roman Catholic church. What more horrible catastrophe can one contemplate than the Inquisition? But persecution whenever humanity is governed by the moral sense and a low form of the social sense is not only true of one people or in one age, but any and all peoples in any and all ages. Persecution is the way primitive man creates the moral and social senses, the way he tests the truth.

In the differentiation which took place in man's social nature in regard to the world of fact and the world of fiction, the moral sense grew to be chiefly stimulated by the imaginary world; for the moral sense being blind is compatible with the grossest superstition for a social sense, as witness Mohammedanism and Mormonism. Among savages and semi-civilized, no superstition is too gross not to be upheld by the fanaticism of the moral sense, resulting in polygamy, slavery, war, cannibalism, and all of the lowest forms of life. Its entire end and aim is order, obedience, statical life. Whereas the social sense, being concerned with the facts of the actual experience of the race, government, the industrial, artistic, and scientific worlds, aims at progress, amelioration, improvement, adjustment to the environment, dynamic life. The moral sense considers its world as sacred, stationary, not to be changed; it is a finality; the world of the social sense is secular, capable of improvement, subjective to change, progressive. To the social sense the race owes the

origination of all that is good, true, useful and beautiful; but it owes their preservation to the moral sense. When energy shall be expended through the moral and social senses perfectly then there will be a perfectly adjusted division of labor in society between the factors of progress and the factor of order and the equilibrium of society will be that of the greatest organization possible to the elements and energies in all nature.

VII

The moral sense even to-day is often misdeveloped, perverted by superstition, ignorance, and prejudice. It is often clannish, narrow, partisan. But on the other hand it is the purest, the noblest, the most sublime and the most powerful faculty possessed by a human being. It gave birth to the Golden Rule, the doctrine of the Brotherhood of Man and a God of love. But the moral sense, being a matter of present feeling and emotion, is blind in its operation. It makes no difference what form of society it is in, it upholds it. It is the established moral sense that condemns the moral reformer. It is the engine of all martyrdoms. The men who have created the moral sense have often fallen by it, the prophet and preachers in all ages and in all climes.

It is not enough to want to do what is right—the moral sense; but one must know how to do right—the social sense. The individual without a moral sense neither cares to do right nor to know how to do right. He is devoid of a sense of right and wrong and knows nothing of social responsibility or social knowledge. He is either a savage or a degenerate. An individual with a moral sense, without a social sense, would do right, but doesn't know how. He accomplishes much blindly. But the truly moral man is one who wishes to do right and knows how; one whose moral sense is supplemented by a social sense. Most of our morality to-day is

devoid of social sense or controlled by the social sense of our savage ancestors, the highest form of which is a belief in a supernatural God and the immortality of the soul—dogmas on which a present civilization cannot be constructed, for the motor power of civilization is not from God, but humanity, and not the hope of an immortal life, but human happiness here on earth. A naturalistic social sense must supplement a naturalistic moral sense.

The social sense figures up the resistance in every line of expanding energy and adopts the resultant of the conditioning energies, determined before the action; it is the line of the greatest economy considering all possible lines in time and space. The social sense looks into the future. It furnishes supplies before there are demands. It anticipates want with plenty. Life according to the social sense is appointed. It is determined. It is the unfolding of a plan. It is conscious evolution, conscious society. And this ultimately for the whole human race beginning with western civilization and ending with the orient. Just as the individual through his reason plans for his entire life in time and space, so society under the social sense can plan for its entire life in time and space. But just as amongst individuals to-day, almost all of them are led by instinct alone, not employing reason to any great extent, so society to-day lives largely by instinct too (the moral sense) not employing knowledge (the social sense) to any great extent.

In highly developed society, owing to the facts of the shortness of human life, that the moral and intellectual development of the individual is but slightly hereditary, society must spend most of its time, through education and discipline, in bringing the individual up to its high standard of requirements. Hence one of the chief functions of the social organism is to educate and train the individual by implanting in him scientific moral and social senses. The functions of originating and developing the moral and social

senses left to-day to specialized individuals, geniuses and martyrs will be consciously performed by society in the future in a scientific system of education beginning with the cradle and ending at the grave.

If man were only an animal there is no reason why he should live beyond forty. All of his individual functions can be well performed in that time. Man's great length of life is due to his social functions, to the demands of the race; and, as racial requirements increase, and man becomes more and more social, the length of his life will increase. In all strictly social and religious organizations—the Oneida Community, the Quakers, and the Mormons—statistics show that the general length of life is increased. The length of civilized life is much greater than that of the savage, and that of the savage is greater than that of the gorilla or the chimpanzee. In the future, when the race shall have been socialized and democratized, the probabilities are that the length of man's life will be doubled. The nineteenth century raised the general average many years; the twentieth will raise it many more. The future of the human race is a cheering prospect to look upon.

VIII

The social organization of western civilization, while of a low grade to-day, is vastly different from that of an animal of a low grade of organization in regard to its capability of improvement and evolution; for while our social organization is very imperfect, it is the perfection of its individual units upon which depends social progress, and not upon the organization as a whole. The social organization differs from the animal organization of a low development in this, that in the case of the animal the units and the whole organism are alike in grade of development; whereas in the social organization, the units may be of a very high grade of development, while the social organization may be of a

very low grade. This is the actual condition of western civilization to-day. The hope of social progress depends upon the high development of its isolated units, the rare individuals, and not upon the social organization. For the high development of the units will inevitably end in a high development of the social organization through society imitating the individuals according to the law of external repetition. The western nations to-day are suffering from the evil effects of a transition from a supernatural conception of things, upholding materialism and capitalism, to that of a naturalistic conception, which will uphold coöperation and morality—that is, the conception that society is all, by all, for all—that there is but one class, the race as a whole; and whenever the transition from the two conceptions and the two systems of industry consequent upon the conceptions is effected, the social organization will receive a development commensurate with the high development of the individual, and will accomplish wonders not dreamed of or imagined before by the mind of man. The social sense will consciously determine the future of society, and direct all human energy into channels of the greatest economy possible in the nature of things, and the socialization of the race will be realized.

Out of the social sense grows government, industry, commerce, fine art, manufacture, science, civilization. It is the social sense which determines whether a given society shall be based on slavery, feudalism, capitalism or coöperation. It does not change human nature, but only enlightens it. It is the social sense that will give a philosophy of civilization, its reason and causes for being, the principles on which it is based, the laws of its development and its functions, structure and destiny.

Owing to our imperfect social sense, we see many perversions in society to-day. The moral sense is often used as a means to hold society in its present iniquitous

position; at best, the social sense applying to it no fundamental remedy for its development into a higher form of society, but using private and public charity to make tolerable, for example, the capitalistic system of industry, and the materialistic civilization about us. Instead of being the foundation of a scientific social sense, the moral sense, as taught by the church, is the most reactionary obstacle we meet with in attempting to apply scientific knowledge to the amelioration of the ills of civilization, and the incomplete psychical life of the individual. The church to-day, as the Jewish church in the days of Jesus, neither does its duty nor permits specialized individuals, geniuses, reformers and scientists to do theirs. The church is a capitalistic ally, which, in the name of God says: "Hands off, nothing is sacred but property!" It is grossly materialistic. It preaches that property is put into the hands of the few by God to be managed for the many. Wealth rules the church. As a result, the church is upheld chiefly by the classes in power, it is used as an anesthetic to deaden the pain of the injustice done humanity in its struggle for social democracy and socialization.

The social sense now in vogue in controlling individuals and corporations through ignorance and error, fails by permitting them to act through individual selfishness. Individual corporations use society the same as they use individuals and nature. Society has but few recognized positive functions; its chief function being that of a policeman. The intricate processes of production, distribution and consumption are governed by blind individual feelings and emotions, the law of supply and demand. Society sits idly by and knows little or nothing of these complicated processes. The injustice and tragedies, resulting from the conflicts of individuals and corporations in these three cardinal operations of society, are overlooked and unknown or put down as beyond the function of the

race to control. The expenditure of individual feelings, if uncontrolled by the moral sense, end in vice, sin, crime; the expenditure of individual energy according to individual ideas in nations, corporations or individuals, if uncontrolled by the social sense, end in panics, poverty, the struggle for existence, and war, the great tragedies of civilization. Yet the social sense of to-day does not acknowledge the control of these operations as its function at all. All the energies of the animal organism are directed by its senses and its intellect, its mentality, to the betterment of the organism as a whole; so should all the energies of the social organism be directed by the moral and social senses to the betterment of the social organism as a whole. But individuals combined in private corporations, professions, and classes set up independent operations, which use the machinery of society, the state, the church and even the school, for private gain. Such organizations are independent forms of life within the social organism, antagonistic to its welfare, as a tumor or a cancer in the animal organism. Every law, every institution, every business method, every method of living, should be designed by society as a whole for the good of society as a whole. The greatest crime, sin, shame, tragedy, is to use society as a whole for private gain. It violates the fundamental law of ethics; yet it seldom meets with condemnation and punishment to-day, because it is done by great individuals, corporations, or the dominant class, which creates the moral and social senses before which it is tried.

IX

Nature having no choice in means takes what is at hand and does the best possible. It has no minions and abandons those who have loved it most on the slightest occasion. The means of developing wealth in society illustrate this truth. Among savages all are free and poor. They are incapable of

coöperation in the production of wealth. The only possible way to originate property, wealth, social power, is for one individual to subjugate another, one tribe to subjugate another; hence slavery. With further progress in industry serfdom is adopted; with still further progress the wage system and capitalism. Wealth is the great desideratum of social accomplishment; without it, humanity is a poor savage; with it, a god. And no institution has been too iniquitous not to be adopted, if it produced wealth; yet the natural and normal condition of humanity is freedom, liberty, and this will be its ultimate condition. It is the problem of civilization how to permit men to be free and yet conserve the vast wealth the race has accumulated. Society is not like a miser who accumulates wealth just to see it grow; it finds an ulterior purpose for it. The only way the race can be socialized, spiritualized, organized, is through wealth. What looks like final causes in nature is that things, resulting from one cause, become themselves the causes of other things. Wealth was created by the individual for his own benefit; but after it is created, it becomes the indispensable means of social perfection. Every cause in nature produces its specific effect, and certain by-products. It is from the by-products in nature and society that most of the wonderful developments have resulted. The stone that the builders rejected becomes the chief stone in some new edifice. Appetite is not the only thing that grows with what it feeds on. Every thing in nature is so. Whatever produces a thing is the cause of a further production of it, and so on forever. Another anomaly is that opposites in nature and society are the causes of each other's development. It is the individualism of the individual that created wealth, and made society and the socialization of society possible; and it will be the socialization of the race that will perfect the individual. Nature goes as far as possible in one line, then takes the opposite

and completes the development. When life and mind were originated it looked to be the acme of economy; but the same principles, that developed life and mind, applied to individuals, developed society. It is the nature of matter and energy in passing through the universal process to pass through these cycles, duplications and reduplications, and, what looks like purpose, is looking at the finished product and refusing to look at the process of development, which always shows the circuitous, indirect route of blind energy, and not the direct route of intelligence, which is purpose.

The whole historic period of humanity has only been a development of processes for producing wealth; and no wonder the common individual thinks there is no other purpose in the creation of wealth than simply to create it, for the few or the one, as the miser, with no ulterior purpose of using it; but such is not the case. It is one of the by-products of individualism that can be used for the ultimate socialization of the race, and thereby the perfection of the individual. Humanity created wealth instinctively; but it can be used intelligently. The wealth of the race to-day is serving its social functions blindly. But the race can develop institutions to change its physical wealth into spiritual wealth, social wealth. Heretofore civilization has been purely materialistic. It is so to-day. If the perfection of the individual, through the perfection of society, is to be achieved the material power of wealth must be changed into the psychical powers of beauty, truth, righteousness by realizing in the individual the perfection of his nature through the complete socialization and democratization of the race, and this can only be accomplished by scientific moral and social senses, which will abolish the imaginary world entirely as an hypothesis that has been exploded. Then perfect economy in the expenditure of energy here on earth will be reached in the socialization of humanity and the ultimate synthesis of life, mind, and society in monism.

Then wealth will perform its social function without any conflict with its individual function, and individualism and socialism will at last be reconciled in perfect harmony.

X

As the mentality of the animal organism has been developed by the law of natural selection and the law of repetition, so have the moral and social senses in the social organism. The moral and social senses are a result of the dissipation of human feelings and human ideas in society; they produce order and promote progress; they are the moving equilibrium of the social organism, which we call civilization: as the mentality of the animal organism is a result of the physical energies of nature, which cause the moving equilibrium we call life. And as the animal organism through its senses and intellect has reached approximate perfection in man, so the social organism through its moral and social senses will reach perfection in the socialization of humanity. And just as the mentality of the animal organism is an organic product, so the morality of the social organism is an organic product. And as the brain is the structure in which the experiences of the individual are stored, so language and institutions in the social organism are the structures in which the experience of the race is stored. Just as the mind of man as instinct did not profit much by taking advantage of nature until it grew strong enough to be aided by education, conscious self-development, so the moral and social senses of society while unconscious have done little towards perfecting the individual and society because of lack of conscious development. But when the cardinal truth, that it is impossible to be truly good without being wise, that there should be an educational qualification for salvation, is generally believed, knowledge will be distributed throughout society as soon as discovered, and the development of the social sense will be

one of the chief functions of the social organism and civilization will be planned for by society as life is now planned by the individual. Then life will be living, not a promise of living, or a preparation for living, or a handing down of life.

Just as a feeble-minded or insane person is incompetent to live in nature and soon meets with death from lack of adaptation to the environment; and intelligent, strong-minded and sane individuals always live and adapt themselves to the environment; so is it with tribes, nations and races: they take their place in humanity determined by their knowledge and live and die by it. History demonstrates nothing more fully than this proposition, and humanity instinctively accepts it as a cardinal truth, as is shown by our perfect faith in education; but our inherited system of salvation, our theological social sense, Christianity, completely ignores it by making salvation depend upon faith, instead of upon knowledge, the social sense.

There has never been a complete analysis of nature, life, mind and society followed by a complete synthesis. Social functions have never been traced to their natural basis and explained from a naturalistic point of view before. The compromise between man's inherited knowledge from the remote past and what he has originated since the revival of learning has so far resulted in modern knowledge being made only ancillary to the classic knowledge of the past. But to-day all society must come under scientific conceptions before society can become a conscious organism. That the state, the church, industry, fine art, medicine, education, science—nature, life, mind and society are purely naturalistic products has never before been boldly stated. But in order that man may be fully socialized such a philosophy must become established. There is nothing gained by concealing the truth any longer, or interpreting it in allegorical terms. As the child develops its intellect in proportion to its ability

to make complicated actions, so society develops its social sense and institutions simultaneously. This development will occur with the forces now at work. All energy seeks the line of the least resistance and when the new way is opened up to social energy, it will inevitably follow it. It is just as impossible to find a storage for social energy as for any physical energy, and when a scientific system of production, distribution and consumption of human property is once pointed out, it will be followed in practice in all society, as when the scientific way of accumulating property was pointed out, and the great combinations of capital known as the trusts were organized here in the United States. Human energy will follow the line of the least resistance just as inevitably as physical energy, and when a scientific social sense points the way the socialization of the race will inevitably follow.

XI

There is a natural conflict between the individual and society until the individual is brought into subjection to it. Often complete subjection never occurs. Most persons to-day live in opposition to conscience and duty, and refuse to think as society thinks, because of the imperfection of our theological social sense. They do not believe in God or the immortality of the soul. Their relation to society is purely instinctive, for they reject the statement of the relation of theology as false. That society is a natural product, that they have a naturalistic relation to it has never dawned upon their minds. They do not understand things and are satisfied with their ignorance. After rejecting God and immortality, they look out for themselves, and think there is no explanation of things that will bring everything into unity. Most persons refuse to think about moral questions above the merest surface thought. They look upon conscience and duty as methods of expend-

ing energy, to be defeated when they conflict too much with their individual expenditure of energy. Fundamentally their conduct is good, because the individual's social instincts are right; but whenever there is great individual gain to be made by deviating from the right line, they do it. How much better it would be for the individual to know what life meant, know his function in the social organism, what conscience and duty are, how they are developed, and thus adjust himself to the social organism perfectly by conscious adjustment, instead of blind, instinctive adjustment as he does to-day? A scientific social sense would tell the individual what he is, what society is, what nature is, his function in nature, in society, and how to perform each. We cannot have anything like perfect morality so long as we permit an unbelievable theology to take the place of scientific knowledge, for individuals will not respect a creed they do not believe, even if they do have right social instincts. There is no God; but let the individualist not deceive himself, there is something in nature that corresponds to God, and that something is society. And while our theological social sense is false and supernaturalism is untrue, yet there is truth in naturalism, and there can be as perfect an organization made from the facts of nature as from the allegorical interpretation of them; and this is the social sense of the future. It is the height of unmanliness not to meet our intellectual situation and master it. It is the privilege of every one to know what he is, what society is, to realize the fulness of his nature, to live in the greatest significance of that word. This is what is open to every one to-day—to live as men will live ten thousand years from now.

The conquering of the individual by society in religious terminology is called the new birth, conversion, and it will always occur even when we have a scientific social sense. In secular language it is becoming a moral and upright man,

intelligent, with common sense, after having been "a spoiled child," after having made a fool of one's self in "sowing a crop of wild oats," the brief and erratic career of the individual independent of the moral and social senses, we all live more or less in our childhood and youth. Man's double nature is very imperfectly understood. Man's individual nature is his ego and is understood by all; but his social nature only among civilized people is referred to as a part of himself; the savage thinks some other being has taken possession of him, which, in a figurative sense, is the case; for man's social nature is the effect of society upon him organized into a personality, which may be called the moral sense, the social mind. However, man's social nature is as much a part of himself as his intellectual nature is, and is as capable of bringing him as much joy. Both his intellectual nature and his social nature are registrations from the environment, one from nature, the other from society, and are for the purpose of adjusting him to his environment, natural and social. In unoriented persons, the influence of one's social nature upon one's individual nature is referred to as the influence of God upon the individual. Allegorically this is true, but instead of some imaginary God, it is to the real facts in human life that we owe all of our morality, owe our social nature, our spirituality and our intellectuality. The good, the true, the great, the sublime—everything grew up in humanity, each generation through millions of years contributing its share, and the race preserving the best, until man has the wonderful nature he has to-day, and society its wonderful institutions. The race worked it all out by itself. Society is a natural product. The individual accounted for things on this theory, then that, and the God theory is one of the latest, and it is only allegorically true, although one of the most beneficial theories ever originated. The only God there is, is the moral and social nature implanted in all of us

by society, through countless ages of development, and the only devil there is, is man's individual nature, which rises at times and revolts against his social nature, and against organized society; and the remorse the individual feels is society in him, blaming him for not living according to it, but according to his individual nature, which, if followed exclusively, would not permit society to exist in its present highly developed form. An individual devoid of moral sense is a criminal. We say he has no conscience, no sense of duty; that is, his experience in society has failed to develop in him a conscience and a sense of duty, something that occurs quite often to-day, when, through our disbelief in the church, as a school, we have forsaken all moral teaching in a systematic form, simply letting the individual pick up his notions of morality from general experience in society. The criminal does not respect law and order, the structure of society. He does not believe in expending his energies according to the rules laid down by the race. He expends his energies regardless of society.

If a child instead of working for money steals it, or commits any common crime, society punishes him by fine, imprisonment, or disgrace. Perhaps the burnt child may dread the fire the next time and regulate his conduct accordingly. If so, the hurt will be an incipient conscience. If the child should expend its energies according to its remembered hurt from the wrong expenditure, and society should reward it by commendation, preferment, liberty and respect, then it will feel an exhilaration, a joy, which will be the beginning of a sense of duty. After years of such discipline, the child becomes a normal human being. This simple process is going on in each of us in infancy, childhood, youth, maturity. It is silent, it is slow, but after passing through it, a normal healthful human being always comes out with a fully developed moral sense.

Just as our mental structures are developed with very little

experience, so our social and moral structures are developed with very little experience. I remember when a child of five of committing a misdemeanor, and, when caught and shamed by a neighbor, I am certain that I have never felt a more perfect compunction of conscience in all my life. Experience shows us every day that children must be taught not only morality, but propriety and decency. All of which is done with very little punishment and reward, if done carefully and consistently. The most inveterate hereditary traits of criminality can be educated out of one if taken in time and persistently worked at. The first years of a child's life are the important ones. Then it is that moral principles and the deep intellectual convictions should be laid. Children should cease to be playthings for parents.

XII

It would be utterly impossible for humanity to govern the individual by laws and institutions alone; for they cannot come close enough to him. They cannot reach him. That is what is the matter with our civilization to-day. Who cannot evade the law? Who cannot deceive society? Who cannot escape physical punishment? Laws cannot be made perfect enough to enter into the heart of man. Institutions have for their cardinal function the development of the moral and social senses and they accomplish it by the control of the individual; yet we think that the control of the individual is their only function. And again, the individual thinks the function of the moral and social senses is to control the individual, when in fact their cardinal function is to invent institutions to control the individual by punishment and reward, and thereby control him by creating within him perfect moral and social senses. It is through the moral and social senses that the race becomes a part of the individual to be present with him an all-feeling heart and an all-seeing eye to approve or condemn the inmost secrets of his

mind and heart, to punish or reward the inmost secret act of his life. The prime function of the social sense should be to develop in us an acute moral sense and through it govern the individual; and the prime function of the moral sense should be to develop in us character and courage to accept the highest social sense possible to the nature of man. The primary function of laws and institutions is to develop the moral and social senses. The moral and social senses are the laws and institutions of society made a part of the individual through the law of external repetition and should be so perfect that they will enforce themselves in the absence of external enforcement. This is what conscience and duty are when perfect to-day.

In looking back over our lives, we can see now our energies have been gradually turned to social advantage, how from the most incorrigible and unteachable children, we developed under the inexorable teaching and discipline of society (the people about us) into moral and sensible human beings. Sometimes when the youth has wealth, position, or genius, it shields him from the influence of social punishments and rewards, and he never becomes normal. Such persons become degenerates, criminals, oppressors, tyrants and often become so powerful that they make laws, institutions, a kind of civilization of their own, and if powerful enough, wreck their nation, even whole civilizations. The youth who makes the best citizens are those perfectly amenable to society, that have to suffer for errors and mistakes, and who always meet with reward for good service. The great and good men and women of the race have been those who have felt the punishment of the race most, and have thus appreciated the reward most. Humanity punishes those whom it loves, and those whom it punishes love it. When society develops in one an acute conscience, a high sense of duty, makes him a respecter of law and order, not at the expense of all progress, a worshiper at the shrine of

the beautiful, makes him a believer in the most economic expenditure of energy according to scientific knowledge, society can leave such an individual unwatched, for he carries within his own character and mind all the necessary ideals to direct the expenditure of his individual energy into the most economic channels possible. To produce such an individual as this will be the object of the scientific system of education of the future, and naturalistic ways of creating the moral and social senses, persecution, martyrdom, will be no more. The supreme law of ethics will be realized in this scientific system of education.

XIII

So, after all, nature, the matter and energies constituting the universe, is a continuous, consistent whole. The universal process not being produced by mind, is rather difficult of being understood by mind; but as mind is a product of it, with careful, patient study its factors can be found in nature, not, however, in their organized form, but instead as the simple energies of nature, and, not harmoniously adjusted as in the mind, but dissipating themselves blindly, as in nature. Studying the simple energies of nature in their blind dissipations the great law of repetition is discovered, and by tracing its manifestations the evolution of the mind is ascertained. And the universal process not being produced by morality and sociality, it is difficult to trace how they grew up in nature, but by patient investigation, by honest and courageous thought, their origin can be determined. By studying the energies of individuals in their interminable conflicts throughout history the great law of repetition is discovered, and by tracing its manifestations in the race the evolution of morality and sociality is seen. Nature instead of being the work of an omnipotent God is the result of the adjustment and readjustment of the radiant and gravitant energies in the universal process, which, no doubt, begins and ends

and begins again, taking billions of years to make a cycle, during which we see the energies passing from the inorganic, through life, mind, society, and back to the primal mist again, as man begins and ends in his condensed and concentrated cycle, which we call life. All of our world philosophies (God, Nirvana, the Logos, the will to live) are guesses at this sublime truth. We have looked at nature from an analytical point of view and end by looking at it from a synthetical point of view. What to us is intellect, in nature is simple physical energy. What to us is emotion, in nature is simple chemical energy. What to us is the moral sense, to primitive man was his fear of an object that hurt him or his attraction to an object that benefited him. Or tracing the phenomenon farther down in nature, what to us is moral sense, to an animal is its ability to avoid what is hurtful and seek what is beneficial. As was stated in discussing the development of the senses, if any new energy were to appear in nature that it would create within man a sense for its apprehension, and this occurred when human energy arose and developed the moral sense as we see it in civilized man to-day. But tracing the phenomenon still further down in nature, what to us is the moral sense is due to the primal fact of nature that radiant energy forms the condition of gravitant energy, and that some forms of radiant energy favor organization of matter and other forms destroy it. The social sense is based on the primal fact that radiant energy traverses the entire universe and communicates its conditions to whatever object it comes in contact with. In the animal it becomes intellect, in man the social sense. What to us is society is but an equilibrium of forces, order and progress, due to a division of labor of the units of society which in a lower form shows itself in sex, as male and female, in a still lower form as plants and animals, and in its primal form it shows itself in the phenomenon of gravitant and radiant energies. All nature is one. We can interpret

all nature in terms of our life, and our life in terms of nature; thus we are akin to everything and everything is akin to us. This is monism. And nature, including everything, is due to the universal process of the eternal adjustment and readjustment of the radiant and gravitant energies constituting the universe.

At last we are face to face with things. We see ourselves in the most insignificant phenomena as well as the sublimest. All nature has a meaning to us—the ceaseless changes in the inorganic, the interminable strivings of the organic, and the complex and baffling struggle for existence in the social world—all are one and the same interminable adjustment and readjustment of gravitant and radiant energies, following the great law of repetition from primal mist, through the organization of nature, life, mind and society, back to the primal mist again *ad infinitum*.

This is the coming true of the allegory of primitive man, the Nirvana of the Buddhist, the Kingdom of God of the Christian Fathers, the Utopia of the social dreamer, the perfect life of the philosopher, the ideal state of the socialist, and you and I and every one has wondered why it could not come true, why human beings, all of us, the whole world, could not live in universal harmony, peace, prosperity, live our better selves, and life be full of beauty, love, kindness, goodness and happiness for all.

The supreme law of ethics, life by the moral and social senses, can be lived by each of us to-day, and it will make no difference at which age of humanity we live, our lives will be the same. It is glorious to know that at last we have reached the ultimate in human conduct, and that it is assured to the whole human race in the future.

CHAPTER XIII

RELIGION

I

To apply the fifth and sixth laws of motion, the supreme law of ethics, the direction of human energy by the moral and social senses, to rectify the existing evils of society to-day, to orient the race through public corporate knowledge (the social sense), to expend all human energy with the greatest possible economy, to socialize humanity, will require an incentive, a motive commensurate with the greatness of the undertaking. Whence the dynamic for this higher order of things? The answer to the question, How shall the human race be saved? is the same to-day as it was yesterday, as it ever will be, by religion. But it will not be the religion of our fathers handed down by tradition (Christianity), but the religion of science that has been worked out from a naturalistic point of view, placed by investigation, by study, by analysis and synthesis upon a foundation in fact, so that everybody can enjoy it and be sustained by it in living the highest life that humanity is capable of. It will be the religion of our fathers stripped of superstition, error, mystery, and clothed in the light of scientific, verifiable truth, and it will be understood as a natural function, and be a part of our everyday life, as the religion of our fathers was before hypocrisy took possession of the world.

Of all the phenomena of the individual and society, perhaps there is none more imperfectly understood than that of religion. What is religion? It has innumerable meanings from the fetishism and animism of the savage to the wor-

ship of the ideal God of the savant; yet, when the truth is sifted from out the error, it is found that true religion is the instinct that develops, protects and perfects the species, often at the sacrifice of the individual, and always at his service, as is seen displayed in every family of animals, from the lowest gregarious animals through the primates up to mankind. We see throughout the animal kingdom manifestations of incipient religion due to mutual aid; for example, in the social organization of insects, which live by mutual service alone, ceasing almost to be individuals in the case of ants and bees; again, in the mutual service of higher animals, as among pelicans, which fish by forming a half-circle in the water and driving their prey into shore; and as seen in our common crows, in their military order in flight, they giving commands and directions; and among wild horses when attacked by wolves, they wheeling into circles and driving the enemy off; and in elephants when feeding, they posting sentinels, and if wishing to cross an open space, sending out scouts, their discipline to leaders being perfect; and in gorillas, their discipline in attack and retreat being human like, the males bringing up the rear in retreat, and heroically fighting, if need be, until death—all animals of the same species in their mutual aid to one another in their social organizations are sustained by an emotion, which, when experienced by man under similar circumstances, is called religion. Everywhere in nature do we see mutual service of animals a stimulus to a powerful emotional condition. This is not only service towards obtaining sustenance, but towards the making of life something else than a feeding, as is seen in animals' great delight in play and in communicating one with another, not to mention the parliaments they hold for sexual purposes, and species-protection through countless numbers. The migratory instinct throughout the animal kingdom, from the lowest animal to man, is a form of religion. No instinct in all creation could make the

mother bird desert her fledging young as does the migratory instinct, except it be an incipient form of religion. The species is so much more important than the individual that when its influence is felt the cry of starving young is not heard. And man has been sustained in his migrations into the bleak north, across the trackless oceans, into the unknown wilderness, by this same religious instinct that achieved for the race in the individual's hardships and death. In every species of animal, from the highest to the lowest, if the species did not help to protect the individual, it would soon become extinct, and if the individual did not help to protect the species, it would soon become extinct. All animals more or less depend upon species-protection for their existence. And all species of animals depend upon this indomitable instinct of the individual for their protection. There is no instinct so little understood as this one. But when we remember the fierce joy we experience in executing our instincts, which, no doubt, to a being devoid of them, would be inexplicable, we can have some conception of the motor power that makes fish, for example, lash themselves to death over rapids and falls to reach the headwaters of streams in their yearly migrations, or why birds congregate in such enormous flocks that extermination is impossible no matter the number of enemies. The emotional reaction to such conduct must be intense, irresistible. This is the beginning of that emotion, which among men is called religion; and man knows little more about it than the animals.

If the theory of evolution is true, then incipient forms of religion should be found among the lower animals the same as incipient forms of all other emotions. It is a common error to believe that morality is seen throughout nature, but that religion is exclusively human. The facts are, morality, race-serving conduct, is the cause of religion, and neither is seen except among living beings, and no matter where seen,

among the lowest animals or the highest men, morality always produces religion. Morality is that line of conduct which protects, perpetuates and perfects the species, the race, and it always results in the emotion of religion. It makes no difference how remote the race-serving function is, if it accomplishes that purpose, it produces the emotion of religion, hence the great diversity of religious service; yet when traced to their legitimate end all religious phenomena are race-serving, race-producing, race-perfecting. What are the feelings among all gregarious animals which cause the leaders to sacrifice their lives, if need be, for the protection of the species? If self-preservation is an instinct, is not species-protection one also? It is this tendency in the lower animals that develops into religion in mankind. Religion is a sociologic instinct that preserves, perpetuates, protects and perfects the tribe, the nation, the race among mankind. Among animals it is not recognized as religion at all, and is called by many other names among men, but it is one and the same instinct all the time. If some such instinct did not bind the species together, perpetuate it, protect it, develop it and perfect it, it would separate, become extinct from lack of organization. Those species of animals which have shown the religious instinct the most highly developed are the ones that have survived in the struggle for existence. It is to religion that humanity owes its existence upon the earth to-day. Those races of men, both in the New and the Old Worlds, which have shown the highest forms of religious worship are the ones that have reached the highest civilization. Witness Peru, Mexico, China, India, Egypt. Our western civilization, while not accounted religious, because it is untheological, since the Dark Ages, is really the most religious of any civilization so far developed; for in all history what civilization has shown greater unity, solidarity of race in useful service to humanity than western civilization at the beginning of the twentieth century? The religion of

western civilization is the religion of usefulness, sympathy, science, and not one of meaningless beliefs and ceremonies.

Religion is the ultimate development of the primitive internal energy constituting matter that causes it during the universal process of the adjustment and readjustment of internal gravitant energy and external radiant energy to unite into higher and higher organizations, beginning with molecular compounds, and ending with humanity. Religion is the ultimate form of the internal energy of matter which binds organizations together. It begins with chemism in chemical combinations, then extends to living compounds. In animals it manifests itself as selfishness. The animal kingdom may be considered a process in originating higher and higher organizations of matter, the higher sacrificing the lower until man places all other animals in subserviency to himself, and ends by the race placing the individual in subjection to it, thus realizing the highest possible organization of matter and energy. In a still more differentiated form internal energy unites the sexes in love. In its highest differentiated form it begins by binding animals into species, men into clans, tribes, nations, and finally, as religion, it unites humanity into one organism. The law of internal repetition repeats the chemical compound, the living animal, the species, the tribe, the nation, over and over again; but subject to the law of external repetition which registers in the chemical compound, the animal, the species, the tribe or the nation, the external energies surrounding it, adapting it to its environment, thus producing greater and greater organizations, until the time will come when the whole race will be one perfect organism due to the greatest, the strongest power known to humanity (religion), the highest possible development of the internal energy of matter. Religion is the social ego, as will, self is the individual ego, and it is upon religion that the moral and social senses are built, as it is upon the will that the emotions and the intellect are

built. Religion is the energy of society, as feeling is the energy of the individual, and as chemism is the energy of chemical compounds. There is thus a unity and evolution in the internal energies of matter, as there is in the external energies constituting its conditions.

II

The simple joy of life is wonderful—the delight of sexual love has been the theme of the poet since language began; but the ecstasy of religion is incomparable. No wonder it is said to be divine. The religious world justly cries out against our pseudo-science which would rob it of religion by treating it as a kind of racial aberration. Religion has ever been, and will ever be, the great compensation to the individual for his service and sacrifice to the race. Religion is the immortal race in us, and we in it. It is through religion that all men are akin. It is the tie that binds the social organism. Religion is the joy of man's social life, as the joy of living is the religion of his individual life. It sustains the same relation to man's social nature that love sustains to his individual nature. It is man's social being. It is the greatest, grandest, most sublime emotion that the human heart is susceptible to, that human life is capable of, that society can produce. Religion, now dormant for want of a rational incentive to touch it into life and give it respectability, for the want of proper guidance, for the want of an intellectual sanction, is amply able to counteract the individual law of self-interest by producing infinitely more happiness through the higher law of social-interest, creating religious ecstasy by doing humane service instead of divine sacrifice. It is through religion that the fifth and sixth laws of motion, the moral and social senses, the supreme law of ethics, will be applied to existing conditions in society to-day, and the socialization of the race inevitably realized.

Never before in the history of the race has the function

of religion been consciously understood, been controlled by knowledge, or been caused by conscious effort to work directly for the benefit of the race. Heretofore religious emotion has been generally produced by any belief, custom or action that conserved the species, the tribe, the nation, the race, no matter how remotely, how indirectly, or how blindly it did it. Religion heretofore has preserved the race as an instinct; now it will preserve the race by conscious effort. No matter how absurd, how wicked, how ugly a common belief may have been, if it held the tribe together, if it produced social unity, it aroused religious emotion. No matter how absurd, how wicked, how ugly a ceremony may have been, if it held the tribe, the nation together, if it produced social solidarity, it aroused religious emotion. And thus groping blindly, by the law of repetition and the law of natural selection, the race has at last reached a rational conception of the true function of religion; finding that it is that emotion which is always produced when some race-conserving, race-developing or race-perfecting function, no matter how simple or how sublime, is performed, from common labor to the martyr's death; or how absurd or how intelligent, from the savage's weird dance to the scientist's untiring efforts at inventing machines to use the energies of nature, or the statesman's arduous labor in originating laws, so that all the energies of the race may be expended with the greatest possible economy. This is why it is that truth has ever had its martyrs; why no nation or no race has had a monopoly of religion; why religion is indigenous to mankind, from the lowest savagery to the highest civilization.

The trouble with an attempt at a naturalistic exposition of religion is that the word is one of such wide meaning. To the scientist busily engaged in some special science, religion is a mental condition of primitive man completely absent in himself and co-laborers; yet he is sustained in his difficult experimentations, comparisons, classifications and verifica-

tions by a love of truth and the joy of possessing it and imparting it to the race—a form of religion. To another kind of scientist religion is a set of beliefs, ceremonies, and forms eminently respectable, venerable, sacred, and not to be questioned, but to be obeyed, complied with, revered—a world in which the principles of science do not hold, religious emotion being generated by protecting these hallowed beliefs from the unwarranted attacks of agnostics, infidels and atheists. Such scientists are very popular with theologians, and are usually decorated with all the honors in the gift of princes and potentates. They are great men while alive— Religion is one thing to one man, another thing to another; but if the stimulus creating it is traced to its source, it will be found that either directly or remotely the services rendered in some way bind the tribe, the nation, the race together; make it possible of social organization.

The soldier's religion is military glory. The business man's religion is love of money; and it is not so bad a religion, for what would humanity be without wealth, the measure of success? There is much sustaining power in the love of money. It is by no means the worst thing in the world. The worst thing in the world is ignorance. The statesman's religion is patriotism. The artist's religion is exhilaration from his work. The scientist's religion is searching for truth and imparting it to mankind. The mother's religion is in caring for, protecting, rearing, and educating her children. The savage's religion is performing ceremonies that pertain to subsistence, the perpetuation of the species, or the protection of the tribe. All of these ways of dissipating human energy tend to benefit the race, only the expenditure of energy is not perfectly economic; not being controlled by the moral and social senses, much of it is lost in opposition and neutralization; but in the end humanity is served. Individual control of energy is better than no control at all. It is society by vice instead of society by virtue. It is

society by egoism instead of society by altruism. It is society by feeling instead of society by intelligence.

The common people alone to-day are religious in the traditional sense of the word. They alone try to be religious according to the Bible and the church in the Western World, according to the sacred books of all peoples. Few of the ruling classes of western civilization believe anything in the divinity of Christianity. They use it to uphold their class distinction whatever it may be, priestly, military, or nobility. Orthodox Christianity is very useful to the reigning classes, and many is the reformer who will wince when he reads what I am saying about religion, for fear it will be used to uphold superstition. This will not be so. Christianity is but a metamorphosis of Buddhism; Buddhism a development of Brahmanism; and the religion of the future will be grafted upon Christianity. The race never loses any good thing. The vast organization of the church will not be destroyed; it will be changed, resurrected. Where did the Catholic church come from? Certainly not from the Bible. It came from the ancient Roman religion and hundreds of other sources, being an accumulation of humanity since it began. So of the religion of the future. All that is good in any religion will live; all that is bad will die. The churchman need not fear that God in a fit of absent-mindedness will let the church be destroyed. That which is good cannot be destroyed; for the good in this sense is God. One need not have any solicitude about what is good; it cannot fail. But no amount of advertisement can give permanent success to evil or error however venerable.

In all our hearts is a desire to do something for the betterment of the race. This is religion. Every youth by nature is a reformer. His object in life is to perfect humanity. He is intoxicated with his dream. But the exigencies of life soon cool his ardor. He loves, marries, begins business, becomes enthralled in the meshes of commercial life, is

entangled in the industrial and business machine. He attempts to do things, and fails. His enthusiasm dies out; and by thirty all the dreams of his youth disappear and his ideals are dead. It is the youth of the race who are religious in the true sense of the word; but the practicality of life makes one live religion as interpreted in his own day, and not for all time. Still back of contemporaneous life, over it all, running through it all, is a deep religious consciousness. All of this great strife is for humanity. The plutocrat, after robbing the masses, tries to soothe his conscience by turning philanthropist. The tyrant, after establishing absolute power, grants here a charter, there a privilege, and in the end undoes all he lived for. It is religion that claims us all in the end. The race is larger than any individual, than any class. It, after all, controls. Sooner or later it gets the homage of us all. If we were not constantly stimulated by doing our duty to the race, by subordinating our individual wills to the social will, by accepting society's corrections of our individual ways of expending our energies, we would soon cease to find an abiding interest in life and become degenerate. The most miserable human beings are those who live either above the human race or below it—the powerful and the pariahs. The happiest are those in closest touch with the aspirations, hopes, and aims of the commonality of the race.

When we note the great endeavor, the arduous labor, the ceaseless toil which persons undergo to accomplish their ambitions for honor, fame, glory, wealth, we should see in their behavior some deeper motive than that of individual gratification. It must have been religion that sustained Spencer and Darwin, as well as Comte, in their life-long search after truth. The joy of art is a species of religion. The love of ennobling fame is equally divine. The desire to be immortal in literature, science, statesmanship is to be placed in the same category. The most sordid miser would

risk his life to snatch a child from under the feet of a runaway horse. What is heroism but the very tap-root of religion? It was the hero in the species who originated it away down in the scale of animal development. Any and all forms of service which tend to develop or perfect the race produce some form of religious emotion, no matter whether the service be secular or sacred.

III

One of the reasons why religion is a phenomenon not easily understood is because it is a subject not open to study. Like all instincts, it must not be questioned by the individual, but obeyed. It is sacred. But the time has come in human development when, to perform its true function, religion must become conscious, must cease to be an instinct, and become a rational emotion through the social sense, as one's ego became a rational emotion through the intellect. Love has performed its function of perpetuating the individual blindly; but it will perform it better when the principles of stirpiculture are applied to it. So religion held together and developed the race blindly; but it will do it better under a scientific social sense than under divine faith or blind instinct. In human life the religious value of work, human conduct, must be determined scientifically and performed accordingly. Vast importance should not be attributed to some really useless ceremony, custom or conduct that can just as well be replaced by some useful service to the race. Elaborate ceremonies become absurd when humanity develops beyond the childhood of nations. We no longer delight in a story told by pictures after we have learned to read. Ceremony has had its day. The symbol no longer satisfies or suffices. The race has reached a stage in its development where all vicarious services have ceased to meet the requirements. Fact must take the place of fiction, truth the place of allegory, and religion must be based

on morality instead of mysterious beliefs and spectacular ceremonies. The only civilization so far in the history of the race that has accorded physical labor any religious value is the present one, and it very scantily; but it will be found from now on that whatever is of utility to the race will be deemed of greatest value in the future, when society will live under perfected moral and social senses.

To substantiate the position here taken of the sociologic function of religion, I cite the success with which religious nations have triumphed over irreligious nations. Of the religious history of peoples the best known is that of the Hebrews. They maintain a most unique nationality now without a country, that most indispensable thing to a nation. The real history of the Jewish religion, based on monotheism, dates back of the history of the Jews before they were separated from the Egyptians, and can be traced even to the ancient Persians. It is a good illustration of the fact that whatever is beneficial to the race is never lost. The Jews owe their nationality to their religion.

The belief in one God ruling everything is the greatest hypothesis invented by the mind of man in the past. It has accomplished more good for the race than any other. The profoundest surprise anyone can experience is to learn that the belief in God is only an allegory. But to analyze and synthesize the facts of nature, life, mind and society, and know that the race, and not God, is the correlate of man, to see for the first time in all history what man really is, to possess a system of monistic philosophy which will do for the race in the future all that its precursor (theology) did for humanity in the past, and which will replace supernaturalism with naturalism, is the greatest theory, the grandest philosophy possible to the human mind. Nothing good is lost to the race. Evolution does not mean that; but it does mean that new good is forever being acquired, and that even to the great good of a belief in one God may be added the

greater good of knowing what everything really is, and thereby realizing the ultimate possibility of matter and energy in the unity of the race which God symbolized.

In the seventh century Mohammed, in the brief space of a life-time, established a powerful empire based on monotheism; and this empire still exists. The great Greek and Roman civilizations were almost devoid of distinctive religious phenomena, their religion being that of politics, patriotism, and artistic and social customs. With all their knowledge, all their wealth, art and grandeur, they gave way to the crude Christianity of the first century because of its superiority in being a religion able to bind all classes into one unique social organism, the Roman Catholic church. These facts demonstrate that the enduring people, the lasting nation, is not the rich, nor the wise, nor the refined people, but the religious people. The Chinese, the oldest nation in the history of the race, is the most religious; and it is to its religion, the worship of ancestors, that its vitality is due. The power of religion in perpetuating a people is seen everywhere on the face of the globe. Witness the ancient Peruvians and the high civilization found by the Spaniards in Mexico. Both were due to the indigenous religion of these respective peoples. It was the religion of patriotism that caused the Greeks to die at the pass of Thermopylae, and it was religion that enabled the Boers of South Africa to battle with the great English Empire for three long years before they were conquered. It is the absence of a national religion that causes the Irish people to-day to be trampled on as they are; they cannot unite. They are religious, not for themselves, but for the head of the Roman church.

Religion, whether good or bad, is a sociological instinct which perpetuates a tribe, a nation, and which will ultimately perfect the race. There is no doubt about the crude hero-worship of the savage being the progenitor of the most spiritual religion of to-day. The savage's apparently useless religion

is the forerunner of the religion of Tolstoi, who would apply the Golden Rule to society. But religion may not only start low, it may degenerate. It may seem far-fetched to classify the negro's superstition about the rabbit's foot with the irresistible tendency of the society woman to go to some fashionable church on a Sunday morning to display hat and gown; yet one as well as the other is remotely a form of religion of its kind, and the reaction, when the stimulus is acted upon, results in religious emotion.

That what is called secular life has any religious value is a proposition our theologians have not deemed worth while considering, their whole theory of religion being only symbolically true, not compassing all of life; but it is the religious value of secular life that most needs consideration to-day, so that only those undertakings may be gone into which are most conducive to human advancement. The reason why modern civilization, although not conscious of it, is really the most religious the race has yet produced is that all kinds of useful service to the race is compensated for by being considered honorable and noble. Our life to-day would be deemed irreligious if judged by the religion of the past, which was made up of useless and meaningless ceremonies and absurd beliefs; but judged by actual service to humanity, it is the greatest and most religious life the race has yet produced. Even in our own life to-day it will be seen that the lines of work that are the most satisfactory are those which are truly useful, as agriculture, manufacture, commerce, and those that are the least satisfactory are the professions, speculation, and the life of the idle classes. No one can be happy unless he is useful to the race. No one can be healthful socially unless he is beneficial to the race. The only real life there is for the individual is to live and work for humanity, that humanity may live and work for him.

The future of humanity depends upon naturalism being able to arouse the emotion of religion, so that humanity can

overcome individualism by the supreme ecstasy of religion which conscious social service will produce. One thing is certain, coöperation cannot succeed simply because it is justified by the intellect, by proof that it is the most economical way of doing things, for that has been tried time and again by various socialistic enterprises and has always failed. Socialization of the race will be accomplished because the moral and social senses will base religion on morality; and religion, thus enlightened, will sweep away individualism with coöperation, as it has always done when directed towards it, and then the social sense will make the socialization of the race sure by demonstrating the economy of the energies of nature under it.

IV

It is only within the nineteenth century that religion was considered a natural phenomenon, and it will be in the twentieth century that its true function will be determined and realized. Heretofore man has not been the object of study in religious phenomena, but instead some extraneous object—God, Satan, and other ulterior powers. Now the full import of the Grecian maxim, "Know thyself," is realized, meaning that man is the center of gravity of the social world, the source of all social phenomena, the object of all, and society but an indirect object to perfect the real object, the individual.

And if it is true that religion created a great empire within the lifetime of one man which has existed a thousand years with no sign of extinction, as it did in the case of Mohammed; so it is also true that irreligion can destroy a great nation in the lifetime of one man. Witness France under Louis the Fourteenth. The greatest irreligion is to have some class in a nation use the social organization for its own special benefit, as did Louis the Fourteenth, who said: "I am the State." But if the exploiting class is large and partly useful, as our plutocrats or the English nobility, the

integrity of the nation is not so much in danger, for humanity can stand much injustice; but as the exploiting class becomes smaller and smaller, as in Rome at the time of its fall, and as in western civilization to-day in many nations, the danger of national degeneration becomes more and more imminent. Modern class society is upon the verge of deterioration. The greatest nations, England, France and Germany, are becoming socialistic from sheer necessity. Think of the paupers in the city of London, one in every five! The United States is as irreligious as any of the modern nations in the sense of perverting the social organization to private use; yet, owing to its national resources, to its democracy, the masses can suffer much injustice and still reach a larger life than the people of the Old World.

As the nations of antiquity, Babylon, Egypt, Rome, went down from irreligion, that is, ceased to perform the functions of developing individuality through sociality, so will the nations of to-day be destroyed; meaning by irreligion, society for the benefit of the few instead of society for the benefit of all. If the race is not organized for all, what is it organized for? Certainly not for the few. But always in the history of the race a few usurp the powers of the nation; then it goes to pieces by the process of degeneration, revolution, or subjugation.

Sometimes religion itself in the form of theology is used to reduce the many to the wishes of the few. Under such a regime oppression lasts for a long time; but in the end, as in Russia to-day, true religion, social utility, asserts itself, and rights and privileges are extended to all the people or the nation goes to pieces. The life of man is so brief, and history so imperfect, that it is difficult to examine the history of humanity in the light of naturalistic philosophy.

The terminology of theology can be readily supplanted by that of scientific sociology. Instead of faith read the social sense. Instead of salvation being free, it is subject to an

educational qualification. Instead of God read humanity. The all-seeing eye is conscience; the all-feeling heart is sympathy, duty. Man's moral sense is society in the individual to watch his individual acts and report them to society through his social nature punishing him with remorse, shame, and misery. Instead of the Holy Spirit read religion due to actual social service to humanity. When once humanity knows what to do to perfect itself, there will be as much advancement made in social progress in one century as we have made in mechanical progress during the nineteenth century. The reason that so little is done by humanity for its own salvation is because it is working through the allegorical plan of primitive humanity. Think of what we have accomplished working blindly under theology, and what may be done under a conscious social sense when we know the factors of socialization! When society is conceived as an organism that is perfected by religion, then social progress and social perfection will be assured.

If religion cannot be thus made conscious, be based on intelligence, the social sense, instead of blind faith, then the race is destined to be devoid of religion, for to-day our traditional religion is losing ground constantly in its struggle with the awakening intellect of man. It is either rational religion or no religion. But human society without religion is an impossibility, because all social service, from common, useful labor to the most exalted sacrifice for the race, is always compensated for by religion, beginning with a pleasing exhilaration and ending in divine ecstasy. We may not call the emotion religion; but so long as the human race exists, all service done for the race will be rewarded with pleasure and life, and all injuries done to the race will be repaid with pain and death.

Religion being the highest form of internal energy, like all internal energy, is statical in its function. In society its chief function is to preserve order, and it accomplishes it by

uniformity in all of our actions, beliefs and institutions. Hence the ultra religious nations are stationary. Religion, like internal energy in all of its manifestations, must be coördinated with the highest form of external energy, the social sense, in order that it may perform its function perfectly; then the social organism will be a moving equilibrium, not only capable of order, but certain of progress. The social sense will point the way, and religion will be the motor power; and thus the ultimate development of the race will be secured.

V

Primitive man, when originating institutions, customs, laws and beliefs to stimulate religion, blindly fell upon customs, practices and beliefs essentially and intrinsically religious; that is, race-serving, race-producing, race-perfecting. This is true because the individual, independent of all social training, is a social unit, and he differed from a social individual to-day only in that he realized his social instincts blindly, whereas a social individual to-day realizes his social instincts consciously, according to the social sense. Nature consists of systems working within systems; the social working within the organic, and the organic working within the inorganic; and there is no greater error than thinking that the individual is not naturally a social unit because he is susceptible of further social development. There is a blind way of doing things, and a conscious way. In nature the blind way developed mind, in society it developed the social sense; and one is as natural as the other.

The unity of nature secured by the hypothesis of God only adumbrates the perfection of the unity of nature which the facts will some day establish; for, despite all of our reasoning from the hypothesis of a God, man has never been able to explain how an omnipotent God could let the devil live, or how it was that a perfectly pure and holy God could be the author of everything, and yet not be the author of evil.

But none of these inevitable contradictions will be found in the naturalistic explanations of things, monism. Everything in the universe will be perfectly organized. The interdependence of the inorganic, the organic, and society will be given; and the individual, instead of referring things to the mystery of God, will trace them to their natural causes. Life will not be a mystery, but a science. Society will not be left to the ignorance and error of the individual, but will be under the control of scientific moral and social senses. Man will look out upon the universe and know just what matter and energy are doing there. He will see the tendency of processes that it takes billions of years to complete. He will look into the hidden recesses of the chemical compound and see there a world similar to the heavens above. He will know all matter by being matter himself, as he will know all energy through the highest manifestation of energy, intellect. He will read in history what mankind has done, and this great mass of knowledge will be organized under naturalism into a consistent story. All life will be conscious. We will know what we are, and what everything else is, in terms of our own being—the only way we can know anything. The hypothesis of naturalism will explain all facts, reduce every phenomenon to law, and demonstrate the unity, solidarity, and oneness of all nature.

The one function that has been heightened by religious ceremony the world over is that of reproduction. Many religious customs can be traced to phallism, and phallism was religious simply because by it the perpetuity of the race was secured. Some writers trace religion as a whole to this ancient and almost universal cult; but this is only one phase of religion, it being due to any race-serving conduct. That marriage to-day is regarded as a divine institution is due to this primeval and useful religion.

No function of the individual has been more essential and imperative than the serviency, subordination, and devotion

of the individual to the tribe or the nation. It had been inherited from the lower animals, when service meant nothing more than congregation and species protection, nothing more than being hedged in by members of one's own kind, and thus kept from being a victim of outside enemies. So nothing was more natural than that the first religion should be service to the ruler of the tribe, and when dead worship, for such conduct is of incalculable benefit in binding the tribe together; something primitive man could not accomplish in any other way. The hero is the precursor of all the gods. If any natural phenomena were deified, they were personified and took their position in the pantheon of deified heroes. Without hero-worship no tribe has ever been able to grow into a great nation; for no matter how large the confederacy, if the hero who formed it did not deify himself and rule when dead, it did not persist. This was the chief cause of the low development of the American Indians and the high development of the Greeks and Romans. The worship of God, the central idea of all religions, was but misapplied devotion to the tribe, the nation, the race, binding it together, as did the hero when alive. This is why the worship of God was so sacred. Upon it primitive society depended. This is why it was sacrilege to disobey and deride the gods; for with primitive man the tribe and God were inseparable: the destruction of God was the destruction of society. And modern man's insignificant defense of omnipotent God ceases to be ridiculous in the light here shed upon this great belief; it is helpless humanity that he is blindly defending.

Originally religion was of the clan, then the tribe, then the nation, now it is of all humanity. The power external to man, to which he is bound, upon which he is dependent, found in all religions, is the tribe, the race, and not some supernatural being. Trace all the names of the gods back to their origin and they will be found to be chiefs and

heroes. The word "God" itself is a corruption of Wod, an abbreviation of Woden. (Another example of the interchange of G and W is in Guillian and William.) Alas, that we should worship Woden! What fortuitous circumstances made him sovereign God in the struggle for existence in the great pantheon of contending deities? The shortness of his name? Or the greatness of his followers? Or did he really have a meritorious life back of him? Was he a hero greater than all others? Or was he one of our primitive saviors, who dimly saw the ultimate unity of the race, and boldly proclaimed that there could be nothing but unity in the universe? Or was he a warrior who tried by force of arms to unite the race into one family and rule over it dead as alive? Anyway, whatever may be the truth, it is certainly high time that mankind trace the emotion of religion to its true genesis, and base life on facts instead of fiction, upon the natural race instead of a supernatural God.

The great merit of the Jewish law-maker Moses (or whoever it was that compiled his laws) over all previous religious law-makers, was his making six of his ten commandments base religion on morality, thus making it possible for the ultimate form of religion to be based exclusively on morality. And the teachings of the Essenes, embodied in the teachings of Jesus, more fully placed religion in its true relation to morality than did Judaism; but we do not find religion and morality standing in their true relation to each other as cause and effect until Roman stoicism was developed. Here religion and morality are one; here for the first time religion is based on a system of morality. Here for the first time, under the name of philosophy, do we see the high quality of life a purely naturalistic system of religion can attain. But not until to-day has there been offered in clear and succinct terms the true theory of religion based on scientific morality.

Religion sustains the same relation to morality that service to one's country does to patriotism; the same as love

does to sexual association; as love of offspring does to the birth and care of offspring. No moral act is ever performed without arousing the feeling of religion. This is why virtue is its own reward. Why sacrifice for humanity is not loss; a man saving his life by losing it, gaining a victory by surrendering all to humanity. This is art for art's sake. This is the philosophy of doing good because it is good. Good is good because of society. This is why martyrdom for the truth is suffered with joy and gladness. The hand that is lifted to bless, during the *auto da fe*, is actuated by the ecstasy of religion in the face of death. This is why such a simple thing as useful labor is always followed with intense satisfaction. Why idleness produces ennui is lack of religious sanction for one's mode of life, owing to its uselessness. Every emotion is due to the things that inspire it. Religion is due to any and all acts that perpetuate, protect and perfect the race, no matter how remote or how proximate.

The true theory of religion would have been understood centuries ago but for the allegorical interpretation standing in the way. In their explanations, instead of starting with the elements and energies of nature and tracing religion to its finished product in man, philosophers invariably started with the finished product, deducing it from Being, Life, Mind, God, the Absolute. However it is infinitely more difficult to explain the blind dissipation of energy in physical inorganic nature, the struggle for existence among animals, and war in human society by the hypothesis of an omnipotent supernatural God than it is to start with the elements and energies of nature, and show, through the law of repetition and the law of natural selection, and the eternal adjustment and readjustment of energy, how, on one hand, external energies developed into intellect and morality, and, on the other, internal energies developed into the emotions and religion. If we start with imperfect nature, all perfection can be traced and accounted for; but to start with a perfect God

with omnipotent power, there is no reason why things should not have been perfect at the beginning, and there is no explanation for their imperfection. The only rational philosophy is naturalism.

The reason marriage is so sacred is because humanity depends on it. The reason property is so sacred is because humanity depends on it. The reason law is so sacred is because humanity depends on it. The reason God is so sacred is because allegorically humanity depends on Him. The reason the church is so sacred is because it was thought that humanity depended upon it for its moral and social senses. Humanity does not depend upon God, nor upon the church, but upon the most economical expenditure of human energy, determined by the moral and social senses, brought to as great a perfection as possible through scientific training and education. It is the moral and social senses that are sacred; it is humanity that is sacred. At last humanity has reached a condition of existence in which it is sufficiently developed to stand face to face with God; that is, that it can understand what God has symbolized, and not be shocked into retrogression by the surprise, but glorified in the revelation. At last man sees through the glass of allegory, not darkly, but face to face with the ultimate facts of nature, human existence, human destiny. This is what all nature has been tending to: conscious individual existence, followed by conscious social existence. Man achieved much when he became self-conscious. How much more will he achieve now that he has become socially conscious!

VI

Science to-day has deemed religion an excrescence upon the body politic, a something in the subsequent development of the race to be gotten rid of. This is a mistake. Religion should not be, and cannot be, discarded any more than we can discard the emotion of love; but, like the emotion of

love, it should be based on facts—the facts of morality, and not the fictions of theology. It is theology and superstition that must go. Religion is just as permanent an emotion as the love of life, as it is a higher development of the same emotion, the love of race. As no animal but man knows the function of copulation, and few of mankind realize that love is an instinct to perpetuate the individual, so not until now has man attempted to fathom the facts of religion and determine its function. The thought-stopping answers of theology have stultified man in his investigations, so that not until to-day has he seen that religion is an instinct beginning in tribal protection, which in time extended to the nation, and now embraces all humanity.

If the tribe is the beginning of religion, we should see manifestations of it among all savages, and while religion there would not be expected to be highly developed, yet it should be the essential life of the tribe. This is what we do find. Savages are really more moral than civilized people, that is, their life is more under the control of society; but their life is not so high on account of their lack of social sense. If savages knew how to expend their energy it would be expended correctly. The trouble is they do not know; hence are the victims of ignorance and superstition. They execute the ideals they have far better than we. The trouble with civilization is, that its social sense (theology) is not in harmony with its moral sense (conscience, duty, and sympathy). A moral sense created under the training and education of theology does not work with the social sense of science. And the conflict between the social sense of science and the social sense of theology results in the immorality of the individual. If the individual should have a healthful moral sense, but sees the absurdity and contradictions of the social sense of theology, he does not hesitate to disobey it. Hence the individual really has no reasoned system of thought to-day; he rejects theology, but has nothing to take

its place. He lives by his social instincts alone, blindly, wastefully, as best he can. The race is really in a deplorable condition. All fine minds feel the horror of the present situation. It is expressed in poetry, in art, in music, in the broken cries of the sympathetic. The race will inevitably have a positive, verifiable, scientific philosophy to take the place of theology. The hope of the race is to base the moral sense on a scientific social sense. We know how to save energy; but, owing to our disbelief in theology, we do not do it. We act contrary to theology, and know it. This condition of affairs amongst savages is unknown. They always live up to their light. There is no such thing as sin amongst them. They all do what they believe to be right. The trouble with them is that their knowledge (social sense) is ignorance, error, superstition and prejudice, fiction and fancy, and, as a result, let them be controlled perfectly by the tribe; yet they live a low life and accomplish nothing.

The savage, too, is more religious than civilized man; but owing to deficiency in moral and social sense, his religion is produced by the most absurd beliefs, the grossest conduct, as well as the most inhuman ceremonies. It is difficult to develop properly man's moral sense since the clan has been supplanted by the tribe, the nation, the city, the state. Religion is not as definite an instinct now, since the tribe has grown into the state, as formerly. But, roughly speaking, to-day the family, the school, the community take the place of the tribe in developing the moral sense, and act as a stimulus for religion. But man's life, with his widened social sense, has lost much of its intensity, and the civilized man does not live that thrilling, real social life which his tribal ancestor lived when every act and thought was determined by his tribe. In becoming an individual man has become less human, in order, in the end, to use his individuality to become more human; for the time will come when the whole race will be to the individual, through sympathy and imagination,

what the tribe was to his savage ancestor; and religion will be stimulated by morality as fully as it was previously by service to the tribe. Man will analyze all his emotions, trace them back to their origin, and then consciously develop them, guided by the principles of science, and thus will ultimately reach that perfect expenditure of energy prophesied in all the sacred books of the race.

VII

The naturalistic conception of religion causes us to see it under many guises, detect it under innumerable forms. An emotion is what it is from the function it performs, and not from the name man has seen fit to call it. This is so of everything. And there is no greater source of error in thinking than that of considering things alike because they are named alike, regardless of their functions. Philosophy deals with facts, not names, and it discovers the relationship among things of the most diverse classification. Philosophy looks at nature as it is and reasons about the phenomena, not about man's classifications of them.

War is stimulated by misdirected religion. The tribe, the community, the nation is in danger, is attacked. Every individual becomes a hero. The individual life is lost sight of in the great life of the nation. Instantly is aroused the powerful emotion of religion, the desire to protect the tribe, the nation, at any cost. At the cry of war a tribe, a nation madly resists all attack and experiences the fiercest glow of joy, glory at its success—religion. The individual life is sacrificed as if worthless so the tribe, the nation is saved. Nothing but the instinct of religion could make a man so oblivious to death, so eager to die that his tribe, his nation may live. How heroism inspires us! Who is so hated, so despised, so abhorred as a coward on the field of battle? What thrills us more than patriotism—the Greeks under Leonidas at Thermopylae, Horatius at the bridge, Regulus return-

ing to the Carthaginians? The gods who have succeeded with men have been gods of war. And it is the same to-day. See how frenzied the United States became at the approach of war with Spain? The same is true of England in her conflict with the Boers. This great instinct of religion carried us all away, and we acted as blindly as so many savages.

While the horror of war is described as hell, yet, as with child-birth pain, its function is so great, it is soon forgotten. There is no horror in religious sacrifice, and the victims of war are immolated on the altar of their country. Without religion to sanction it, war would cease to be at once. And when it is understood that back of war is the blind instinct to defend the tribe, then protection will be sought through intelligence, not force or blind conflict. But the religion of war being blind, it defeats to-day the very object its function is to perform, that of protecting the tribe, the nation, the race. It was well enough to defend the tribe from outside attack. It even developed the nation; but the race will be made into one organization by the force of intelligence and not by force of arms. War, instead of promoting racial unification to-day, defeats it. War is another example of a good thing outlasting its usefulness and defeating its original function. Imperialism will conquer the world; not the imperialism of war, but of ideas, knowledge, science. Peace is the gospel of religion to-day, not war; and he is the true hero to-day who decries war, not he who dies on the battlefield in a futile and foolish waste of human energy.

What has been accomplished through war is another example of nature not being choice in its means, for the primal object of war is destruction; yet it is to war that we owe the development of the tribe, the nation, the confederation. But war has done all it can do. It will be through knowledge and peace that the nations of the earth will unite into a confederation comprising the race. As enlightened as the individual is to-day, it appears to be almost impossible

to believe that, for the sake of the ruling classes, he would go out and be shot down; but the instinct of religion, like all instincts, acts blindly, fatally. It is a sad commentary on the intelligence, the morality of the twentieth century, that it cannot effect a social organization except by war, going back to the instincts of the savage. Here is where individualism ought to assert itself, and the common man should tell the class-rulers: "If you want battles fought, fight them yourselves, for the differences between the governments of contending nations to-day are not worth fighting for, let alone dying for. I am for peace. I am for the race."

In the day of the tribe war was sacred, essential, for the tribe not only waged war against men, but nature and the beasts of the field. It stimulated religion, and was the most essential thing to human existence. It was through the struggle for existence between tribe and tribe that the irreligious tribe was weeded out, and tribes developed that became social organisms with mutually dependent parts. It was by this circuitous route that the humanity of to-day has been evolved; through the hardships of war indirectly our tender loving-kindness has been developed. But war now, instead of performing its original function of saving the race, is the chief cause of its degeneracy and destruction.

In an age of international economic dependence and interdependence, war is racial suicide. If we could abolish the various tariff laws that still prohibit the perfect commercial organization of the race as a whole from an economical point of view, if we could have ten years of free trade, war after that would be an impossibility, a nightmare of the past, relegated to oblivion with the plague, slavery, superstition, and cannibalism, its close kinsmen.

The cosmopolitanization of capital will be the final death blow to war. The true conception of religion will destroy patriotism. With the economic dependence of one nation upon another, with the socialization of life, war will finally

cease to exist. To-day it is fostered by effete monarchs and emperors, and jingo presidents whom chance has given office, by the immoral greed for commercial supremacy of various nations, by our materialistic conception of life, by our having no moral or social education except what we accidentally pick up, and by the individualistic philosophy, which, in emancipating the individual from the tribe, puts him without the pales of the race itself, making his life that of criminal aggression controlled only by force of arms.

VIII

Under our hypocritical theology modern man is a godless monster, yet capable of being controlled only by a God. The individual has reached the acme of intellectuality, but owing to a lack of social sense, a religion based on morality, he is unable to combine, coöperate and organize. He is a great unit; but, from lack of social and moral qualities, he is incapable of forming a great humanity. Nature, when it abandoned tribal control in order to create property, in order to work by the individualistic method of egoism instead of the altruistic method of sociocracy, because the individual was not sufficiently social to so act, entered upon the circuitous plan of developing society by sheer individualism; and now to-day, when individualism has done all it can do, nature will take up again social development by racial means where it left off on account of being unable to so act with primitive man.

Before an ideal civilization can be reached, the world socialized, the individual must again become moral, that is, responsible to the race as his primitive ancestor was; must make the welfare of the race the dominant motive in all of his actions. Man is no more an independent individual than one of the constitutional units of his body is an independent unit; and to realize his highest life he must be in a social organism, performing his true functions the same as the constitutional

unit in his body must be in an organism performing its functions. No wonder the unhappiness of to-day! The mental uncertainty, the harassing doubt, the prevalent moral cowardice, the intellectual anarchy, the chaos of all knowledge! The gilded misery, the ennui, the disease, the squalid poverty, the insanity, the suicides! No animal is so unhappy as man, because his instincts, his emotions are so complicated, his intelligence so limited that he is incapable of performing his proper functions. Savages with all their dire ignorance, superstition, and want are little worse off than we. The poor to-day, with their hunger, dirt and disease, are as happy as the pampered rich with their ennui, idleness and pusillanimity. It all will be arranged according to intelligence when men see the tendency of things and stop acting blindly; see that it is just as impossible for the individual to be happy in a miserable social organism as it is for one constitutional unit of the body to be happy in a miserable animal organism. Let individualism recalcitrate as it will, the weal and woe of all is the weal and woe of every one. There is no escaping the pains and miseries of the race. They penetrate into the palace, enter into the mart and the clearing-house. The interdependence of all is the greatest truth; and the only way to live is to live for all, and thus, by losing our individual life in the greater life of humanity, we find the greatest life we are competent to live. The old life—to live for the tribe, the community, the nation, humanity—is the true life; then happiness will dawn upon us as a reaction from our previous conduct, and we will be intensely satisfied. This is religion.

The time has come when we must discard the symbolical conception of things. The race must base its institutions on facts, not shadowy symbols of the facts. Our institutions must be traced to their source and consciously produced, founded. No longer can we trust to the haphazard development of the contending energies. We must know

what we want in institutions and realize them. Every emotion should be studied and its stimuli determined. The race must live consciously, or it will cease to live at all. No longer can we trust to any other help than human help; all other help, or pseudo-help, but weakens the race instead of strengthening it. Such truth as this may come with a shock, but, by heroically contemplating it, that which at first repelled will in time attract, then be loved, and finally be obeyed. If the race is ever to know its situation here on earth, now is the time. Let us speak the truth.

IX

Just as the sovereignty of the state has been found to be not from God; that kings reign not by divine right, but by the consent of the people; that the people are sovereign; that, as government is of the people, by the people and for the people, so is religion of the people, by the people and for the people. It grows out of the race, is fostered by the race, and protects and perfects the race. This is the function of religion. The state is but one of its manifestations. The church is another. And the school will be another. No tribe or nation ever amounted to anything that did not have the ability to develop a system of religious beliefs and ceremonies; and the greatest beliefs in all past religions is a belief in a supernatural God. A godless tribe never amounted to anything. But now that humanity knows the facts, it is the part of wisdom, it is necessary, to have the organic continuity of the race, the facts of human existence, perform their natural function of unifying the race and forever discard all symbolical fictions, gods and immortality. In fact, this must be done, for the ruling classes of humanity know that there is no God, and if we trust to Him to protect us we will go unprotected; for strong individuals, corporations and classes, not believing in God and not having the moral and social senses developed, will apply the primi-

tive method of expending energy; that is, turning it to individual and class advantage and using the race as a whole for their own benefit. This is what is happening to-day. God and all the theological machinery is perfectly impotent to stop it. What would any of the great individuals, corporations and classes which are using the machinery of society the world over for their own advantage and benefit, care for being excommunicated? But could it be done? Certainly not. These traitors to the race own and run the church, and how could it excommunicate them? Governments are very much in the same condition, only there are millions of good people everywhere that are waiting for the true theory of things, to-day as in the days of Jesus; and when they get the light, the good work of turning the machinery of society to the benefit of all will be begun. We must speak the truth and live by it; show that the facts of human association have created the moral and social senses; that they are the primal basis of society, and not some imaginary God who cannot be found in all the universe, or even proved to exist; that it is by the development of the moral and social senses that humanity will be saved, perfected, socialized; that religion will be the reacting emotion from the application of the moral and social senses to the amelioration of the ills of humanity, and to its subsequent development and perfection; that if the race cannot be developed by the moral and social senses with religion as the motor power, then the end is only a question of a very short time.

It is an exhilarating thought to know that humanity is self-sufficing; that the race is not dependent upon some capricious God who cannot be found when wanted, who made us for His pleasure and takes delight in tantalizing us; or some benevolent but impotent deity who lets his rival Satan amuse himself by tempting us to eternal perdition. It is a delight to know that religion is not due to sacrifice to an idol, or to an imaginary God; but is due to service to

humanity, to the human beings about us, and extending from them to the whole race in proportion to our own greatness; that the race is the source of all of our inspiration to work, to hope, to love, to aspire, to think, and to live. What a joy to know that society is the author and perfecter of our being; that at last we know what God is, and that the race is not God in the old barbaric sense, but, instead, the organism of which we are both the whole and the part, thus living a double life—the physical individual and the psychical social organism, receiving all the joys there are from each, and reaching in our life the acme of the development of the elements and energies of nature. At last the individual has found an object in the race worthy of his sacrifices, worthy of his passion, worthy of his thought, worthy of his work, worthy of living for and dying for. We know that society is an organism which will meet the individual as a correlate in all of his needs of a higher and deeper life, a finer and purer existence; that henceforth his prayers will be heard and his sacrifices be appreciated and accomplish something; that at last religion has a meaning, a definite function; that morality and religion are cause and effect, and that, finally, the social organism, symbolized throughout all history as God, has begun to act for itself, and the individual no longer sees through a glass darkly but lives in the white light of conscious existence.

All prayers, all songs, all poems, all literature, all music, all art, all service should be inspired by humanity and directed to humanity. The literature of antiquity was about gods; the literature of to-day should be about men. The great poet will be he who shall comprehend the monistic conception of nature, life, mind and society in the universe, and express it in artistic language; not the fall of man, nor paradise lost, but the orientation of man, the socialization of the race. The great novel will be the epic of humanity, the coming sociocracy.

Science should be studied with the one aim of seeing how the energies of nature, the individual, and society can best expend themselves in the most economic manner possible in order to enable the individual to see through nature the individual life and mind and the social organization the same as one with a technical education sees through an art product, sees how all effects are attained and how further improvements can be made. When the methods of nature in expending its energies in its three forms (inorganic, organic and social) are known, society through the social sense will introduce the same beauty into civilization that it has introduced into the fine arts; the same utility into civilization that we see in the useful arts. Then religion, instead of being a blind instinct or a sporadic emotion under the control of the will o' wisp of ignorance and error, will be a definitely understood emotion of the individual, resulting from service in developing, protecting and perfecting the race, and scientific morality will be the motive of all progress, as science will be the way, the method; and the resulting civilization will be a moving equilibrium, the perfect social organism, the summum bonum of humanity.

CHAPTER XIV

THE SOCIAL ORGANISM.

I

With certain knowledge that the solar system is an organism, with equally certain knowledge that the whole universe is an organism, with perfect knowledge of the organization of inorganic chemical compounds here on earth, with no dispute whatever that plants and animals are not organisms, it seems strange that every one should not see that one of the most prominent characteristics of matter and energy in all their forms is that of organization, and the greatest anomaly would be to see it absent in human society—the highest manifestation of matter and energy that we know anything about. In the face of this seeming certainty, one school of sociologists maintains that society is not an organism at all, and no school commits itself perfectly in regard to this fundamental theory of sociology. There is much discussion among sociologists as to the exact nature of the social organism, some taking the position that there is no organism at all; others that it is an organism similar to the animal organism; still others that it is not a physical, nor a biological organism, but a psychical organism, and that psychology is the basic science of sociology.

One is almost tempted to think that such capriciousness among scientists is due to a desire to be original rather than to express the facts in the case. There is such perversity found amongst the greatest thinkers; witness the attitude of Schopenhauer towards Hegel, and Spencer towards Comte. As most of what the race hands down to

us—language, art, science, government, industry—has no stamp of individuality upon it, it is well not to be so careful about thinking original thoughts as having one's thought capable of verification in nature and society, no matter who originates it.

When scientists say there is no social organism, they mean is that there is no conscious social organism; and this is true. Just as man before he became self-conscious could not have been said to be really an animal organism, because his organism was run blindly by instincts and stimuli; so the social organism to-day is run blindly and instinctively by stimuli, and is in a stage of development similar to that of animals that have not reached self-consciousness. They do nothing with any purpose, live haphazard, blindly dissipating their energies according to external stimuli. Society lives similarly to-day. It performs its functions blindly. Most human energy is wasted in opposition and neutralization. But as the energies of nature developed the senses and the intellect in man, so the blind dissipation of the energies of individuals in society develop the moral and social senses; and as the function of the intellect is to guide the animal organism to perfect expenditure of energy, perfect organization, so the function of the moral and social senses is to guide the social organism to perfect expenditure of energy, perfect organization, and whenever this is realized society will be a perfect organism; and as the blind expenditure of energy in nature ends in a self-conscious individual organism, so will the blind expenditure of energy in society end in a social-conscious social organism.

The concept of a social organism is one destined to be accepted more and more as time goes on; but as to the kind of organism we have to-day that is yet to be determined, not by a study of biology or psychology, but by a study of all the sciences; for we have seen in our investigation that the expenditure of energy in society is no exception to the expen-

diture of physical energy in nature, or the expenditure of energy in the animal organism; energy always follows the line of the least resistance, determined by the conditions in each particular case. Society's possibilities, its practicabilities in the expenditure of energy are yet to be seen.

Society is certainly an organism, and in time it will comprise the whole race; but it is in such a nascent form to-day that its organization is very imperfect. Society to-day is bound together by feelings and beliefs much more than by economic considerations. Most nations go to pieces, not from lack of physical subsistence or lack of organization, but because of lack of harmony among their beliefs and feelings. Greece was intact so long as the Grecian mythology made the colonies and the mother country one. It was a matter of belief that separated England and the United States. It is due to its beliefs that China has been preserved from destruction for thousands of years. How long would Turkey remain one nation but for its religion? Would Western Europe have ever been Western Europe but for Catholicism? But nations have an additional factor to hold them in a social organism, that of economic dependence. It will be a community of feeling, belief and knowledge, coupled with interdependent economic conditions that will unify the race into one organism, directing all the energy of the different nations into the most economic channels possible, and thereby be the greatest protection to property and the greatest security to life. The tendency of socialization is in this direction, and its realization is but a question of time. There is no doubt but economic considerations, the cosmopolitanization of capital, will cause the end of all war and petty nationalities, will utterly destroy all the restrictive theories of government; but a unity of belief, knowledge, will be back of it all. Nations, as well as men—even more so than men—are amenable to morality, and the motor power of all morality being religion, hence the social organism is

primarily held together by feelings and emotions, the chief being religion. It is true we must all more or less think alike, must have the same theory of things; unity of thought has always been the greatest stimulus to religion (the greatest example heretofore being a belief in one God), a theory of life which the monistic conception of things, when it becomes universal, will absolutely demonstrate. It is as impossible for civilized people to live apart, not to exchange mutual services, as for the individual to be civilized and live away from his fellows. All of the nations of western civilization are psychically one people now; they are upon the verge of perfect economic dependence. The tendency is to make western civilization one vast social organism, the precursor of the whole race as a social organism.

II.

The analogy between the animal organism and the social organism is imperfect, because the animal organism for comparison must be taken from a family of animals far down in the scale of development. The social organism to-day is in a stage of development similar to that of an animal with a sense of touch fully developed, but with the other senses only nascently developed. Some object at a distance comes between such an organism and the light, and, as the shutting out of the light is usually followed by an injury to the organism, the animal feels the absence of light and the accompanying hurt, and registers it in its organism; but not having any eyes, does not see the object that causes the injury. By taking advantage of the energy of light, shadows and images that are reflected into its protoplasm through the law of external repetition, the animal in ages of time unconsciously develops an eye whereby it can see the object that causes its injury. So to-day the social organism little more than feels its injuries by the moral sense, and, owing to the imperfect condition of the social sense (knowledge), it

does not see their cause and does not know how to direct human energy so as to avoid injury. But just as the reflection of light on the tissues of the animal organism, through the law of external repetition, developed and perfected a sense of sight during ages of time, so the distribution of knowledge in society, through the same law of repetition, will develop and perfect a social sense by that conflict in the expenditure of feelings and emotions which results in creating in individuals a sense whereby they can know society and their relation to it; know its conditions, its functions, its destiny.

Individual experience with society communicated from individual to individual by language develops in each a consciousness of the condition of the social organism as a whole. When a social imperfection is seen by any individual and its cause determined, and the individual is able to communicate his knowledge to society, the imperfection will be remedied through the motor apparatus of the social organism, now also in its infancy, and the right expenditure of energy will follow, guided by social consciousness, or knowledge, and the highest civilization possible be attained; the same as in the animal organism when some individual tissue is injured, it communicates its feelings to the organism as a whole, and a proper avenue of expending energy is furnished by the intellect of the animal, and the injury is remedied or avoided by the organism as a whole. The function of the social sense is to direct the opposing, the neutralizing and wasting energies, the feelings and emotions of individuals, by turning them to one purpose—the betterment of society through knowledge. The social sense distributes knowledge of all kinds throughout society, so that society through knowledge can direct the energies of the individuals into the most economic channels possible and direct its own organic actions by knowledge as well as feeling, making of the social organism a conscious

entity resulting from all the energies of all the individuals, as the individual is a conscious entity resulting from all the energies of nature. This is the third great controlment; society as an organism directing and controlling the actions of its units, and its own actions by verifiable public, corporate knowledge. It is a sixth law of motion, and the supreme law of ethics of the coming humanity.

There is one radical difference between the social organism and the animal organism, that is, the directing power. The sovereignty of the organism in the case of the animal is centralized in the ego of the organism; while in the case of society it is in the individual units—the individuals—but bound together by feeling, sympathy, religion. The units of the animal organism are unintelligent, while the units of the social organism alone are intelligent. The animal is controlled by the centralized intellect and ego, the ego furnishing the motor power, the intellect guiding it; society is controlled by knowledge and religion—religion binding society together and furnishing the motor power, knowledge directing it to racial welfare. The more centralized the intelligence of the animal, the higher its superiority; the more dispersed the intelligence of the social organism, the higher the civilization, until perfect dispersion is reached, when we will have universal democratization and socialization of the race. The more specialized the units of the animal organism the more highly developed the organism. The less specialized the units of the social organism the higher the organization. The object of all the laws of the animal organization is the direct preservation of the animal as a whole. The object of the laws of society is the indirect preservation of society, and the direct preservation of the individual; but the one cannot be accomplished without the other. In this regard the tendencies of the animal organization and the social organization are opposite. The animal organism is held together by

the physical, by the various tissues of the body. Society is held together by the psychical, by the moral and social senses and their resultant, religion.

Another difficulty about the concept of the social organism is just what division of humanity constitutes a social organism. Is it a tribe, a nation, a race, or humanity as a whole? In some senses it is each of these; for some purposes each. Morally and intellectually the whole race is one organism; but economically, to-day, each nation is a separate organism. Just as there are billions of forms of animal organism which are classified into five types, so the social organism has many forms which can be classified in a few types—the clan, the tribe, the nation, the confederation of nations, and ultimately the human race as a whole. And a similar history has occurred to the social organism that has occurred to animal organisms. There is no doubt but that man's animal organism has passed through certain phases of all the animal types; so the social organism to-day has passed through the various types of the social organism, and is destined to reach the acme of social development as man has reached the acme of individual development.

III

Just as the animal organism adjusts means to ends through ideas, thus securing the greatest economy of energy, so the social organism, when perfected, will adjust means to ends through public corporate knowledge. The social organism to-day acts blindly and adjusts means to ends by instinct, stimuli, and our imperfect moral and social senses. The animal organism registers ideas, possible lines of expending energy; the social organism registers knowledge in language and institutions, possible lines of expending human energy, feelings and emotions, in the most economic manner possible, constituting the social sense. An idea is the residua of external energy in an organism; knowledge, the social

sense, consists of concepts resulting from the coalescing of ideas; it is the residua of ideas; it is the common mass of knowledge the individual accepts as the truth, independent of experience and investigation; it is the mental environment of the individual. It may be error; it should be verifiable truth. It is what the race as an organism has learned and recorded about itself and nature, used to guide the individual in the expenditure of his energies through institutions and knowledge in his actions in society. The external manifestations of the social sense are language, institutions, the arts and sciences. The internal manifestations in the individual are representations, concepts of the external manifestations registered in the individual by the law of repetition through education and experience. The individual really inherits his social sense outside him, for the reason that acquired social characteristics of the individual are only slightly hereditary; whereas society, through the law of repetition and natural selection, preserves everything that is good and true and beautiful. It is better for man to inherit his social sense outside him than within him, because the process permits of greater variation, greater adaptability, greater development.

While the animal organism has little trouble in using its energies through ideas, the social organism cannot direct human energy by knowledge unless it is distributed among all the members of society so that it can be made into laws and institutions. Here it is the analogy between the animal organism and the social organism breaks down; for the relation of the human mind and body is so much more perfect than the relation of the units of the social organism and knowledge and institutions. Man's individual nature and his social nature are not nearly so well understood as the relation existing between his mind and his body.

It is a much simpler form of organism in which the intelligence of the organism is centralized, as in the animal organism, than it is when located in the units as in the social

organism; but the possibilities of the social organism with its intelligent units is vastly superior to the animal organism with its blind units; for having the mind of the social organism throughout the organism makes it susceptible to the widest possible environment, hence susceptible to the most complete adaptation to nature. Nature goes from one extreme to another. In the animal organism the highest development was accomplished that could be accomplished by the centralization of mind in an organism; in the social organism it will be seen what can be done by the decentralization of mind, making the organism as a whole the seat of the directing power. The possibilities of the social organism are as much greater than the animal organism, as the animal organism is greater than inorganic matter; but owing to its infancy to-day its wonderful future is not divined.

Ideas classify themselves in the mind the same as the energies producing them classify themselves in nature, and because all phenomena through the law of internal repetition and the law of external repetition are resultants of the interaction of the energies constituting matter and the energies constituting the conditions of matter, there is sufficient likeness in the multitudinous phenomena of nature to make but one classification, it being the different forms of the energies constituting matter. Besides, ideas are always in connection with the internal energies of the organism and the motor apparatus for putting these ideas into actions. Whereas the association of knowledge in the social organism, depending upon language and institutions, is handicapped by their imperfections, so much so that the most important knowledge is not distributed for ages after it is discovered, and institutions based on it are not so much as dreamed of, let alone founded. The social mechanism for distributing knowledge (the rostrum, the pulpit, the theater, the press, conversation, the school), the social mechanism for discharging social energy (oral and written language, the tele-

phone, the telegraph), and the motor mechanism for social guidance (the community, the church, the school, the state), are all in their infancy.

The life of the individual being so short, the social organism so difficult of organization, owing to the imperfection of the social sense, and not being consciously produced, as a result the social organism, consisting of civilization to-day, is only in a nascent form of organization. Society is almost wholly a product of feeling—the moral sense, private corporations, powerful associations of men, professions, families, classes actuated by individual energy, selfishness, in opposition to the moral and social senses, actuated by the altruism of religion.

IV

There are some few functions that society regulates by knowledge; but conscious social control is decidedly the exception. The human race being run by feeling, as a result, while the right action is performed in the end, it is at an enormous waste of energy. As everything in physical nature tries to produce the individual, so every individual in society, in his own way, tries to produce society, not according to knowledge, but to feelings, emotions, instincts; hence the conflict, waste of energy and final adjustment. The production, distribution and consumption of the products of the race in every department of life are almost wholly a matter of feeling. The social organism never orders anything made, anything produced, anything distributed, anything consumed. It acts from stimuli alone. Whatever is felt is done. Nothing is known beforehand. Supply and demand is a blind law of feeling, of instinct. The laws of political economy are natural laws, energy taking the line of the least resistance determined by the contending energies, not lines of right or truth, purely physical, unmoral and unsocial in the true sense of these words, and are uninfluenced by

knowledge. They are antagonistic to the moral sense because they permit one man to take undue advantage of another, and permit individuals and classes to take advantage of society as a whole, making the ruling class a kind of parasite to live off the race to the detriment of every one. The laws of political economy are antagonistic to the social sense because they justify the neutralization, opposition and waste of human energy we see displayed everywhere in society to-day in the struggle for existence, in the unjust distribution of wealth, in the prosecution of wars and governmental oppression, and fail to introduce the same economy into society by verifiable, scientific, public, corporate knowledge which is introduced into the life of the animal organism by the intellect. The social organism is indeed imperfect.

Really the analogon of the social organism is not the animal organism, but the organism we see in physical nature, the solar system, the universal process. Energies in inorganic nature are perfectly blind; they take the line of the least resistance in their expenditure, and the result is determined by the contending energies. This is what takes place in the social organism, only there are nascent forms of social organization in which there is some economic control. The best that can be claimed for the control of society is that it is similar to the lowest forms of animal life. The social organism when perfectly under the control of the moral and social senses will then be similar to the control of the animal organism to-day. The waste of energy going on in society reminds one of the waste of energy going on out in physical nature, not the fine economy of the perfected animal organism under the control of the intellect.

Just as the intellect of man supplies his organism with the most economic forms of expending energies by having recorded in its nervous system the experience of the individual in the form of ideas, so the perfect social organism through knowledge (the social sense) will supply the social

organism with the most economic forms of expending energy in the form of laws and institutions. But to-day the products of society are produced as extravagantly, as unintelligently, as carelessly, as blindly as animals and plants reproduce themselves in a state of nature. In order that one tree may live and reach maturity millions of seeds are produced; in order that one animal may live and reach maturity millions of animals are born. So with the productions of the human race to-day. Enough food to supply the whole human race can be produced in the central states of the United States, but the so-called machinery of distribution of the race to-day is so poorly, so ignorantly, so unscientifically developed that with all of its vast productions, the greatest evil that confronts the race to-day is artificial poverty. The distribution of the products of society flow as irregularly, as wastefully, as unintelligently to their markets and uses as do the rivers of the earth in their tortuous windings towards their great market, the sea. There is no conscious adaptation of means to ends in society to-day. Everything is done blindly as in inorganic nature, or by instinct as in the lowest forms of animals. Society nowhere shows that adaptation of means to ends which man makes under reason, or which society will make under the moral and social senses when the social organism is perfect. The expenditure of energy in society to-day follows the line of the least resistance, or greatest attraction, of present experience, feeling, instinct, and not any of the many lines that could be worked out by knowledge or have already been discovered by the human race during its long history. Or the functions of society are performed by classes prostituting the social organism to their own use, and letting the great mass of humanity be workers in the human hive of civilization, supporting them in their royal usurpations. If any of the energy of society is made to follow lines of least resistance guided by intelligence, it is not for society as a whole, but for the particular

intelligent class. As a result human life is still on its lowest plane, the physical. Not more than one person in a hundred strives for anything else than a physical subsistence. We live as the beasts of the field, the fowls of the air, and the fishes of the sea. All of our multifarious exertions, our strenuous efforts, our everlasting actions are after food, raiment, and shelter. And while there is abundance for all, social control is so imperfect that a few take everything and the vast majority are in actual want for the physical necessities of life.

It is pitifully absurd to see individuals who have nothing blandly acquiescing in letting others take everything they produce; but it is intrinsically more absurd to see individuals who have millions striving for more as if upon the verge of starvation. Life has but one occupation, but one enjoyment, but one end—the production and accumulation of property. There are two explanations of this anomaly. The production of wealth is a social instinct which developed away down in savagery when physical subsistence was the most important problem that confronted the tribe, and which the individual still follows blindly; and secondly, the social function of religion is not sufficiently developed to cause men to forsake the physical function of the production of wealth, with incidental consumption (for the great pleasure of money is in making it, not in spending it) as a means of producing happiness in preference to mental and moral service to the race. But the time will come when mental and moral accumulations will be as valuable as physical property, because upon them will depend the future of the race. Such is beginning to be the condition of affairs in western civilization to-day.

The race, so far in its attempts at a division of labor in society, has always resulted in developing class-life, which usurped the life of the social organism as a whole, and which ended in degeneracy, decay, and death of the social organism.

But the various classes developed, starting with some great individual, then family, clan, then class, have gradually become larger and larger until finally the race as a whole will be one great class controlled by intelligence and organized by religion. There are two kinds of human beings, those who work for order and those who work for progress, a kind of sex; and in the perfect social organism these two distinct kinds of persons will be adjusted in function so that the social organism will be a moving equilibrium, and realize the greatest organism possible to matter and energy, and thereby secure the greatest economy of energy in all nature.

When society is looked at in this comprehensive way, we see the imperative necessity of having the social sense perfectly scientific, so that the necessities of society can be determined, its needs ascertained, its aspirations calculated upon, and that all the race be provided for by a profound foresight and planning. The life of the race is as possible of determination as the life of man. The great trusts have shown us what intelligence, corporate knowledge, can do when applied to industry. Only that amount of labor in any line which is necessary should be performed. It is waste to produce where there is no necessary consumption. A scientific social sense will render the entire globe habitable, and will limit the number of human beings by the principles of stirpiculture to a select few to live upon it and enjoy it.

The unequal distribution of the products of the race, which we see to-day, rights itself naturally by producing degeneracy among the classes that get an undue share, as they spend it in follies and vices; and the dire poverty among the oppressed classes, while it often causes degeneracy and criminality among them, is yet a great stimulus to genius, and the inexorable hardships of life produce an acute moral sense, which results in religion. Poverty is an ill wind, but it blows humanity much good. Unfortunately for the race, the fact that human property is so poorly distributed is not

patent to all; the moral sense developed by the church being so dull as not to feel it, and the social sense of theology so blind as not to see it. We are told that it is God's will that things should be so, and for believing it we are promised a realization of our hopes in a life beyond the grave. It is shocking to realize that the moral and social senses of to-day have such an antiquated conception of human destiny, and that our scientists, moralists, and reformers do not boldly, courageously and grandly proclaim the truth, and let man come into his inheritance that lies in the destiny of matter and energy, the perfect socialization of the race.

To-day the poor cannot live a higher life on account of poverty, the rich on account of greed. There is little use to preach the beauties of art, the grandeurs of science, the good of morality, the religion of protecting and perfecting the race through knowledge; for with every one locked within the death grip of the struggle for existence, who can hear? Even short as life is, if it were controlled by laws and institutions worked out by knowledge instead of instinct, it could be made so beautiful! We live in such a wonderful world, and are such marvelous creatures ourselves, infinitely greater and grander than ever theology conceived, yet nothing more than products of the elements and energies about us, how can any one be content simply to exist and not know all there is to know; to live and not feel all the delightful feelings and emotions possible to our wonderful nature! How small human life is; how large it could be!

And yet one who proclaims this greater life, this heaven on earth, this justice to all men, this greatest happiness to the greatest number, will be anathematized by the very persons who logically should be the first to accept it.

V

The mind, the inherited and registered experience of the individual, is seemingly almost perfect in its functions, every

conception being within its grasp except infinite time and infinite space; while knowledge as registered in language and institutions, the inherited, registered and executed experience of society, the social organism, is so imperfect that a comparison between the mental organism of man and the institutions and knowledge of the social organism may seem visionary; still there is not so wide a difference in perfection as at first seems to exist. The mind is no more a perfect unity than society is; it is little more organic, but its organization is simpler and much more definite. Besides, our egoism makes us strangely deluded as to the perfection of the mind, and our ignorance of the social organism renders us incapable of making the comparison. But when such processes as production, distribution and consumption are carried on without any great disequilibrium for years at a time the life of society must be highly organic, the unknown energies of society controlled by blind social instincts adjust themselves one to another, resulting in the present social organism of which we know so little. We do not understand. We are parts of an organism with such intricate functions that we do not know what the whole organism is; we are parts of an organization too great for us to comprehend. Yet, when looked at from another point of view, the mystery of the social organism grows less; for by diligent study, all of its phenomena can be placed in a very few classes and a concept of the whole be made.

Mind is a total product of the condition of all of the brain cells and nerve tissues of the body, and is unified by the association of all ideas with the idea of self. But while all of the ideas of the mind are in connection with the will or self, or, differently put, while the whole content of the intellect is organized with the will, and we can say that we know all that there is in our nervous system, yet there are many kinds of ideas that have no relation to one another, and no matter if they are in connection with our will, they are

never brought into consciousness in comparison with one another. A mind so constituted, and all are so more or less, is illogical; that is, its ideas are incorrectly grouped or not grouped at all. Men's theological ideas have little to do with their scientific ideas, their business ideas with their moral ideas, their political ideas with their religious ideas, or, to put this defect in our terminology, their moral sense is not supplemented by their social sense, and their religion is not based on morality. The human mind is profoundly illogical. It is almost as inconsistent as society is discontinuous. The individual as an individual often knows his best interest no better than society knows its best interest. This is why self-interest cannot be the basis of the social organism. We can really know the interest of others better than our own interest, and by working for it instead of our own interest the perfect social organism is secured. Society must be based on social-interest, religion; then justice cannot be denied to the individual, for it will be in the possession of the entire race.

Society is the total product of all the actions of all the individuals, corporations and classes constituting it, as they are bound together by feelings, emotions, knowledge and institutions, and by economic dependence. Society is unified by the instinct religion, which protects, perpetuates and perfects its existence through the moral and social senses; and as the moral and social senses are very imperfect, so society's organization is very imperfect; its adaptation to nature is imperfect, the individual's adaptation to the social organism is very imperfect, and consequently the functions of the social organism are very imperfect. But when the social sense is verifiable scientific knowledge and religion is based on morality, then the social organism will have known functions and known structures, the same as the animal organism.

Religion is in all of us, and has been in humanity since it was low down in the scale of animal development. It is the

social cement of society. Whether it is the highest emotion possible to man, or one of the lowest and most superstitious, depends upon the development of the moral and social senses of a people. Whether or not religion is a blind superstition, being a reaction from the grossest idolatry or the basest worship of imaginary gods, who sanction the murder of innocent children, who punish unbelievers with eternal torment in a burning hell-fire, or a reaction from the performance of one's intellectually appreciated functions in society, depends upon the moral and social senses of a people in vogue at any given time. Religion is to society what the ego is to the individual; and as the ego is the center of gravity of the individual, so religion is the center of gravity of the social organism.

No wonder it is difficult for us to get a perfect conception of the social organism, when religion, the cause of its statical conditions, is so little understood; and the function of knowledge, the cause of its dynamic conditions, is not comprehended. The social organism, being run by blind instincts, expends its energies so wastefully that there is no wonder that the individualists say there is no social organism at all. The social organism will be as comprehensible as the animal organism when the function of religion is known and knowledge, the social sense, is extended to the whole race. Then the unity of the race will be effected by religion; its energies will be guided by knowledge, and the economy of all energy will be perfect.

Society is organized by distributing knowledge of itself among all the individuals constituting it. There is no trait of character stronger in man than the desire to communicate knowledge; none gives more pleasure. To impart knowledge is an instinct. Nothing is so fascinating as news. Humanity is so susceptible to knowledge that a startling alarm produces a panic, a stampede, and the ensuing action of intelligent men is similar to that of gregarious animals.

During the enthusiasm of a political campaign, one sees the ease with which great masses of men can be moulded to some one belief through self-interest, fear, partisanship. With the proper dynamic, the human race is very susceptible of change. When knowledge and religion are coupled, the perfection of the social organism is but a matter of time.

While it is impossible for an individual to know his relation to each and every individual of society; yet, as society as a whole is but a repetition of similar parts, a working knowledge of society as a whole is by no means an impossibility to the individual, in fact, is as easily acquired as knowledge of nature in relation to the individual organism. As the different parts of the brain can communicate with one another by means of the internal energies, so it is possible for the mind, through self, to group all of its ideas into one unity. The individuals of society are bound together by their religion, perfectly or imperfectly, depending upon its purity, elevation, refinement and the fulness with which it holds sway. The individuals of society communicate with one another by means of the moral and social senses in the languages and the arts, residua of human experience in human energy with human beings. Whether or not the whole of the phenomena of society is registered in the individual depends upon the degrees of perfection of language and institutions, the moral and social senses; for upon them depends the quality of its religion, its entire civilization. At the present status of society the majority of the individuals are ignorant of the organization of society; hence social institutions are not only impotent, but often defeat the very function for which they were created.

Religion to-day is chiefly a matter of individual salvation; its social function of binding the race together as an organism is still instinctive. The imaginary world is still supreme, and the destiny of nations, the race, is God's business, not humanity's. But while this is deplorable, think of the condition of

society three centuries ago, when poverty was not deemed an evil, when war was the only way of settling public, national, and international disputes; when the struggle for existence was acquiesced in as a curse of God, and our beautiful and exquisite life was so black that the whole Western World believed it a curse and only a preparation for an imaginary life beyond the grave in which our longings for justice, purity, freedom, security, socialization will be realized! How unkind God is to make us take a promise for all our noble aspirations, our sublime hopes, our grand expectations! Is it not beautiful to know that theology is untrue, and that our longings for a greater life are a prophecy of their realization here on earth and not beyond the grave?

The ignorance of the social organism by a majority of its individuals is due to the imperfection of its organization, to a low form of religion, an imperfect development of language and institutions, and a low form of the moral and social senses. Our present condition can be attributed to a petty conception of the function of religion and relying upon an imaginary God for the salvation of the race instead of upon the moral and social senses scientifically developed. So, really after all, the phenomena of mind are as difficult of comprehension as the phenomena of society; for the philosophy of the mind would also be a philosophy of society. There is no cause for despair. The high development of isolated individuals with a true theory of things, a true concept of the ultimate social function of religion, will inevitably formulate a plan for the organization of society on more economic lines than now, and society will inevitably adopt it; for human energy, like all energy, will seek the line of the least resistance when once known. Our hope of salvation is not based on a vision, but on facts and the laws of the dissipation of energy. Progress will inevitably result from the promulgation of the true philosophy of civilization, which shows the individual what he really is, and gives him a rational basis to work on.

Language is by far the greatest achievement the race has ever made; oral language being a kind of sense of hearing to the social organism, written language a kind of memory; language is a kind of social nervous tissue in which the race receives knowledge and stores it for future ages. As knowledge is to the social organism what ideas are to the animal organism, and as the more pictures of nature, ideas, avenues of expending energy the animal organism has registered in its nervous system, the more different kinds of actions it is competent to make, hence the greater adaptation to the environment; so the more knowledge the social organism possesses in the form of scientific knowledge, the greater variety of action in the individual it can determine, and the more definite action it will be able to perform as an organism, hence the greater the adaptation of the individual to the social organism and the greater the adaptation of the social organism to the environment. There can be no truly great civilization without universal verifiable knowledge; as a high form of animal is impossible without many ideas with which to protect itself. Civilization has developed as knowledge has been acquired; hence the necessity of distributing knowledge. This is to-day an ever-present instinct. The naturalistic explanation of the eagerness with which human beings communicate knowledge of all kinds is that it is through knowledge that the social organism adjusts itself to its environment. So far in history the communication of knowledge by the press, the pulpit, the theater, conversation, the school, has been more or less instinctive, each distributing knowledge in its way; but the time has come when knowledge should be distributed consciously and its great social function be made known to the whole race. The coming great institution of humanity is the school. It will take the place of the church, and will supplement the home.

VI

Character is to the individual what institutions are to society. Character is the residua of the actions of the individual; institutions are the residua of the actions of society. Character is a result of executed ideas; institutions are a result of executed knowledge or blind feelings and emotions.

There is a profound truth in the dictum: "Believe and thou shalt be saved!" For if the individual has an imperfect social sense, he will necessarily fail in adapting himself to society. He will develop a character out of harmony with society. And society with an imperfect social sense will produce institutions that cannot control individuals. If the individual possesses a verifiable social sense there is no doubt as to the glorious future of society. Nothing is of more importance. It is for this reason that society has the right, and has always instinctively exercised it, to determine the individual in his beliefs, in his knowledge. We make a great pretense at absolute freedom of thought, but the race to-day does not permit differences of belief and knowledge only in matters of opinion. We have freedom of thought in developing, extending and interpreting fundamental principles; but the facts are, social types of thought are no more to be departed from than organic types of life are varied in the evolution of animals. We have freedom of thought within prescribed limits, as the animal has opportunity of variation within prescribed limits.

Persecution is the logical result from the function of the social sense. It stands to the social sense as punishment and reward do to the moral sense. Heresy is a thing to be deplored; for it may lead the whole race astray on fundamental doctrines of social progress; yet it is through the heretic that progress results, that the social sense will finally become verifiable knowledge. All animals which live in societies develop certain organs for social defense, for example, the sting of the bee—death to the individual but life to

the hive; so society develops certain specialized individuals—reformers, geniuses, martyrs—who die that society may live and develop. Persecution is the fire in which the gold of truth is purified. It has been the only way that primitive man could test the truth. It is the struggle for existence in ideas and the survival of the fittest. In condemning the excesses of the Inquisition, we have gone to the opposite extreme, and the individualist says that society has no right to control the thought of the individual at all. Let the individual think free, live free, at his peril; if he persists, the race will persecute him with shame, disgrace, even death. He pays the penalty, as does the bee which protects the hive with its own life.

The objection to a censorship is that it is exercised in the interest of a class rather than the whole of society. It is the abuse of social control instead of its proper use. Criticism, ridicule, ostracism, obscurity, oblivion are the natural punishments for the failure to comply with the social canons of thought. A man of genius will stand any amount of social censure, while an eccentric will soon change his mode of thinking or pass into obscurity. There is no characteristic more common among men than the enforcement of uniformity of knowledge seen in actions most trivial, as the guying of cranks by children, and in actions most serious, as the martyrdom of men of genius by society as a whole.

Let the mental product be what it will, the social sense acts at once to reduce it to the racial type. If the thought be great enough, it changes the entire social sense by being repeated in it; as, for example, the work of Lord Bacon, the French philosophers of the eighteenth century, or the teachings of Martin Luther. The same is true to-day. Few writers have received more criticism than Charles Darwin, and few have had more influence on the social sense of his age. If the individual's thought is too remote from the

social type, or is not in line with developing humanity, he is left to obscurity, maybe centuries afterwards to be taken up, as in the case of Democritus and Epicurus. Again, the genius may fail of appreciation by his generation, but be so in line with human progress, that he will live for centuries as a modern, as, for example, Shakespeare. That writer lives who can anticipate the social sense of the future, let him be poet or scientist.

VI

What the social organism will be like when it is more matured is dimly adumbrated in the different kinds of societies we see among bees and ants. There is danger, however, of being misunderstood in this comparison, for with ants and bees (for that matter all animals) feeling is the only way of guiding individual actions, as it is with us under the moral sense. The social life of ants and bees is society by the moral sense alone. They have no social sense.

With humanity the moral sense is supplemented by the social sense, and human civilization is higher in proportion as mankind is higher in intellectual development than ants and bees, and as the social sense is wider in scope than the moral sense. In the coming socialization of the race the social organism will be the object to be maintained, not for itself however, but for the benefit of the individual; and the individual will be perfectly coördinated to it, as the individual bees of the hive are now coördinated to it. The individual's social functions, however, will be as great a source of happiness to him then as his individual functions are now. He will be a specialized individual, as is the genius to-day, his precursor. To-day the individual is supremely happy only in being selfish; then he will be ecstatically happy only in performing his social functions; he will be happy in being altruistic. The development of such a society is only a matter of time; for social organisms are as well within the

province of the possible development of the universal process as chemical compounds, plants and animals, and nothing but our narrow theological social sense could keep us from seeing this great truth.

When the human race is once socialized the habitability of the entire earth can be realized by the enormous power of the social organism, it being able to change the face of the entire planet by equalizing its temperature, products and substances. Probably this has already occurred in the case of the planet Mars. Matter and energy reach their highest possibilities in small planets the same as in larger ones, intelligent beings appearing at different times, owing to different physical conditions. Human destiny here on earth is as grand as the destiny of any of the intelligent beings in any of the numerous solar systems seen throughout space. Nature is but a repetition of itself, and what we see here on earth is duplicated all over the universe. Really the earth is a universe within itself. But in order to comprehend this great monistic conception of things we must get rid of our theological social sense and look at the facts as they are.

Nothing is really more surprising than the individual's egregious egotism as reflected in our theological social sense, which teaches that the whole universe was created that he might live. And it is equally surprising that man does not see that individually he cannot accomplish anything; that the only possible way to realize the perfect control of the energies of nature and the energies of society is through the socialization of the race. And when a naturalistic concept of things does dawn upon the race, the progress of humanity will be incalculably great, and the socialization of the race will be speedily realized. We will make up lost time. In the coming democracy will be realized a perfect sociocracy.

CHAPTER XV

SOCIAL DYNAMICS.

I

The world is full of reformers, but these physicians of the body politic, like the physicians of the animal body, too often treat the symptom instead of the disease. What society to-day needs is not adjustment of particular facts to the individual, such as temperance reform, tax reform, civil service reform, and so forth, but the perfection of the moral and social senses that will naturally remedy all of these evils by a just distribution of wealth, which will result in general social health and progress. With economic freedom the possibilities of the race can be realized. Beginning with our savage ancestors, when they first used the word "mine," the significance of property has constantly grown, until to-day the further development of the human race is menaced by its unequal distribution, by its individual accumulation, and by its popular worship. It is taking the place of religion. In its control of property the human race has tried force, it has tried cunning, but the real control in the production, distribution and consumption of wealth is morality and knowledge; not the class-morality of to-day, nor the theological intellectuality, but a morality based on scientific knowledge and a scientific knowledge based on a study of nature and society purged of the mind-closing theories of theology and sustained by religion based on morality, race-protecting, race-developing and race-perfecting conduct. What society needs above everything else is a theory of things comprehensive enough to touch the individual's dor-

mant religious nature, and call it into enthusiastic activity; then all the vexatious petty evils of life will be swallowed up in the one great evil of individual and social imperfection, and all the petty reforms will be embraced in the religion of perfecting society through consciously invented institutions, and thereby the perfection of the individual will be secured.

Just as the intellect is constantly changing, despite the will of the individual to keep it steadfast, the average person deeming consistency and persistency of beliefs the chief of perfections; so the moral and social senses are constantly changing despite society's love of order and stability of institutions; all innovations being branded with some opprobrious name, and conservatism, even when manifestly unjust, always being deemed the best policy for right living.

It is the custom amongst scientists to-day to treat all subjects only from a statical point of view. It is not good form to suggest change; it is a breach of scientific etiquette, something vulgar. It is deemed that the function of science is to describe what is, and not so much as to hint what ought to be, let alone suggest changes. That there is a dynamical aspect to all subjects is apparent to all logical minds, and it is as much a function of science to ask the questions, what can be done? what ought to be done? as to answer the question, what is? And it is the double function of science to answer both questions.*

The ultra dynamists of society believe that the social organism can be torn down and rebuilt as any product of art

*"All know how the uneducated talk. Suppose changes in laws and institutions are suggested. People frequently smile in a superior way and say: 'It does very well for a theorist to talk, but it is only theory.' Conditions of property, labor and capital can not in their opinion be changed, and they assume that such as they are now, they will continue to be. 'No,' say they, 'things will go on pretty much the same old way.' Now if there is any such a thing as a good old way in nature or society the man has never yet appeared who has discovered it. There is none. The assumption that there is such a thing is mere fiction. * * * Laws undergo change, and institutions, which are the outgrowth of laws and customs, are gradually, but perpetually undergoing modification.' *Introduction to Political Economy*, pp. 35, 36, by R. T. ELY.

—a house, a machine; the ultra statists maintain that the social organism is as inevitably fixed and unchangeable as the organic type of an animal. Each of these extreme views is erroneous. In proportion as society is an organic product in that proportion will it be impossible for it to get away from its type; but in proportion as it is an evolutionary organism that has been developed by the laws of internal and external repetition and the law of natural selection, in that proportion is it capable of modification by the environment. Society to-day, being in a nascent form of organization, is extremely mobile, and of the two parties, the dynamists and the statists, the dynamists are destined to be dominant in the immediate future. For every gain in dynamism there is a corresponding gain in statism; but if the dynamists are not in the majority society stands like Prometheus chained to a rock, a god, yet incapable of action.

The two fundamental laws of nature are order and change; order being primarily produced by the energies constituting matter, change being primarily produced by the energies constituting the conditions of matter. It is the interaction of these two sets of energies which produces everything we see in the universe, as everything occurs in the universal process from primal mist to primal mist. It is the interaction of these two sets of energies in their most highly developed forms of religion and knowledge which produces society. Religion produces order, organization; knowledge produces change, progress. Order and progress in society form the equilibrium which constitutes the social organism. When either set of energies fails to act, the life of the social organism abates, and, should either completely stop, the organism would go to pieces. Civilization without progress is just as impossible as civilization without order.

The natural unconscious action of the moral and social senses has done all it can do towards perfecting the social organism. Just as the individual by conscious effort per-

fects his mind and character through education and training, so must society through conscious effort distribute knowledge throughout society, and by conscious effort reach social perfection. It is just as incumbent upon society to see that there is progress as it is to see that there is order; but neither progress nor order will be secured until society is controlled by verifiable public, corporate knowledge and organized by a religion that is based upon morality.

II

Just as the animal organism through the physiological division of labor developed organs, so does the social organism. But what is misleading about the organs of the social organism to-day is their manifest imperfection. What we call organs to-day are but beginnings of what will be organs under conscious society organized through true religion, perfect devotion to the race. Under such a society energy will be expended economically, and the greatest happiness to the greatest number will be realized.

The organs of society to-day consist of institutions public and private: private institutions being business, artistic, scientific, social, religious; public institutions being municipal, county, state, national and international. The function of all institutions is to direct and control human energy, and they accomplish their work through corporate knowledge. Examples of successful guidance of human energy through public corporate knowledge are limited in number and kind; but examples of successful guidance of human energy through private institutions, usually called corporations, are the characteristic social phenomena of our age and the immediately preceding ages.

Governments, while ostensibly administered for the benefit of all, are still the same as in all past time, administered in the interest of powerful classes. Society, public corporations, can scarcely be said to be run by public corporate

knowledge even for class purposes. It is still government by blind feeling. Powerful classes, houses of nobility, oligarchies of wealth, plutocracies of privilege sustain to the social organism on which they live a relation similar to that of the host to its victim in parasitism. And as a form of government, it is equally as low as the other is a form of life. If it were not absolutely impossible, owing to the high mentality of the individual, the human race would yet develop a form of society similar to that of ants and bees; but instead all tendencies to such a class-form of life have invariably ended in degeneration, decay and death. Man is destined from the nature of his intellect to universal democracy and complete socialization. All class governments have two tendencies—to live so long as they enlarge the governing class and die as soon as that process stops through degeneracy, decay and death. The ultimate society will be class-society—but the whole race will be the class.

Society began with individualism, then followed class-government. As civilization develops the governing class enlarges, until to-day, here in the United States, there is a semblance of truth in saying that in the United States we have a government of the people, for the people, and by the people. This, however, is so in name only. The true function of government of all, by all, for all can only come about with the democratization of the race. The ultimate goal of humanity, as seen in all history, as family has enlarged into class, class into people, is to make the whole of society into one class, one people, thus realizing the democratization of the race. A great consummation, the realization of which is the hope of the twentieth century.

There is hardly a department of civilization in which some individual institution is not now acting, and in many instances private corporations perform the functions peculiarly belonging to society as a whole, thus using the social organism as a means of private gain. Everything in nature

develops blindly. The third law of motion, the expenditure of energy in nature along the line of the least resistance determined by the blind contending energies, is used until the fourth law, the expenditure of energy along the line of the least resistance determined by intellect, is developed; then the fourth law is used until the fifth and sixth laws, the expenditure of energy by the moral and social senses, are developed. Nature holds to the lower way, or method, of expending energy until a sufficient development is reached to adopt the higher, which inevitably takes place, for the fundamental law in the expenditure of all energy is that it takes the line of the least resistance, however it is determined—by force, by intellect, by knowledge. So private corporations assuming public functions is purely transitory, a stepping-stone to public corporate guidance. What private corporations have been able to save for themselves through corporate knowledge, public corporations some day will be able to save for society, and thus will be able to give to all perfect economic freedom. The private corporation of to-day is a teacher of the public corporation of to-morrow; as class rule is but a preparation for social rule. It is thus that society disciplines the individual to social control. As the animal organism by intellect directs its energies into the lines of the greatest economy and controls natural energies to individual advantage, so will the social organism under the social sense, public corporate knowledge through consciously invented laws and institutions, direct human energy into the lines of the greatest economy, will act upon nature as an organism, will thus accomplish changes on the face of the earth for human welfare now beyond the power of human imagination to conceive; such as the equalization of the temperature of the earth, and effect changes in the social organism that will eradicate the social tragedies of poverty, the struggle for existence, and war by the enlightenment of humanity, which will lead it into a life above the physical

into the world of the good, the true, the beautiful, the social, as successfully as the moral sense, when perfected, will eradicate the vices, sins and crimes of the individual.

III

To show the great gain that society will make when it is able to act from verifiable public, corporate, knowledge, let us take some specific examples of such action from private corporate knowledge. Before any of the great trusts of the United States were organized there were thousands of small producers distributed throughout the United States who were duplicating one another in every branch of the business now controlled by the trusts. The present manager of one of the greatest trusts saw that the various producers of the article, which he wished to control, opposed, neutralized and wasted one another's energies, so that not more than half of it ever accomplished anything; that by organization, through corporate knowledge, the great business of all of these producers could be made to flow into one channel and thereby dispense with one-half to two-thirds of the persons, and from two-thirds to four-fifths of the capital used in the business, and that by this economy much energy measured by millions of dollars could be saved. The great trust, which he now manages, was organized, and applied the law of action from corporate knowledge, instead of the law of supply and demand, to the production of the particular commodity his trust handles. Human energy was made to follow the lines of the expenditure of energy as determined by corporate knowledge and not blind feeling. The accumulation of untold millions is the reward of this great trust; yet the commodity it produces and controls is now cheaper to the consumer than it could possibly be under the old system of competition, the struggle for existence and private enterprise. The difference to society is that the untold wealth made by the trusts, if they were not in existence,

would be wasted in competition, duplication of plants, and partly distributed among the small operators that would take its place. But the difference that will be made some day is that society will absorb these private corporations into its municipal, county, state, national and international corporations; then all the profits made by action from public corporate knowledge will go to the benefit of society as a whole, and not a few, and there will be the same saving in distribution and consumption, through public corporations controlling all commodities, that there now is in production and distribution as controlled by private corporations.*

But society itself in some lines in the United States has availed itself of the law of expending energy through public corporate knowledge. Take, for example, our public school system. Our public schools not only save a great deal of energy, but accomplish the object of education much more efficiently than any system of private schools ever devised. In order to have education as universal as it now is in the United States, under the old system of private schools, it would require at least three times as many teachers as we now have with corresponding expenses in other lines. The saving is enormous and ought to demonstrate that the law of action from public corporate knowledge, through laws and institutions, can be followed even as little developed as the race is to-day.

But this saving is the very thing that some persons fear most, for they imagine if this new law of motion were followed that the economy secured would compel them to engage in other enterprises at great individual loss. This argument has been urged against all inventions, all labor-saving machinery, all progressive and ameliorative institu-

*"It may, perhaps, be laid down as a general rule that when for any class of business it becomes necessary to abandon the principle of freedom in the establishment of enterprises this business should be entirely turned over to the government, either local, state or federal, according to the nature of the undertaking." *Introduction to Political Economy*, p. 82 by R. T. ELY.

tions, against all reforms either moral, religious or social. Under society by corporate knowledge this objection will be perfectly groundless, yet the fear of being thrown out of employment causes many persons to stand by the old regime of relentless competition, expending energy according to blind feeling, regardless of the waste of energy entailed. What of that, if it gives them a living! There are more teachers now than ever before. The reason is that when the new law of motion from public corporate knowledge is introduced into any of the departments of civilization concerned with moral, mental or social development of the individual, the amount of that kind of work to be done is at once increased and becomes greater and greater as the race develops; and all the energy that was formerly wasted in competition and misdirection, under the law of expending energy by corporate knowledge, will be used to the betterment of society as a whole, and thus the betterment of the individual. While the law of action from public corporate knowledge lessens the number of workers in physical labor (for under it only that amount of physical labor will be done that is absolutely necessary) it will increase the number of workers in mental, moral and social labor hundreds of fold; such labor, however, is always a labor of love.

Man's mind must be turned from the physical to the mental, moral and social. As the race creates all values, there will be no great trouble in making mental, moral and social values higher than physical. Such is the case now amongst the higher class of minds; all that is necessary to complete the process is to widen the tendency.

One of the reasons for the enormous glut in the labor market the world over—there are untold millions unemployed—is that there is no demand for anything but physical values. When society is once economically free, then labor will be directed into intellectual, artistic, moral and social channels, and we will have a life in which all can be suc-

cessfully employed; for then all kinds of values will pass current in our socialization.

To-day the life of the human race is physical, materialistic, worldly; under the law of expenditure of energy from public corporate knowledge, it will be mental, artistic, moral and social. To-day a human being is an animal; under the expenditure of energy by public corporate knowledge, action through consciously devised institutions, he will be a social being, a perfect individual. Probably to-day not one per cent. of the human race reaches the height of development it is competent to attain, and not even one individual reaches anything like perfection; and in the course of history, through the fortuitous concourse of the different currents of life, if one individual does reach anything like perfection—a Shakespeare, for example—he is thought to be an anomaly, a great genius; yet such a life is within the possibilities of the whole race. Think of the unnumbered geniuses that the race's unfavorable reception has dwarfed into insignificance! For if the social sense is not correlated with the intellect of the individual, there is lack of harmony and lack of development, if not degeneration; because the individual's social environment, laws and institutions, methods of expending human energy, destroys individuality instead of developing it. So long as the race is compelled, through mistaken methods of living, due to an imperfect social sense, to devote the greater portion of its time to physical labor, owing to the waste of physical products in competition, ignorance, war, so long will it spend what leisure time it has in physical vices and follies; for it is only the mental and moral laborer who enjoys mental and moral pleasures. Mental and moral institutions to take the place of our materialistic life are adumbrated in our institutions of learning, scientific, artistic, literary societies, political and religious associations and industrial and commercial organizations. Think what a student will do to

acquire a Ph. D.; what a scientist will undergo to achieve distinction among his compeers by becoming a member of any of the many great scientific societies.* What will a French literary man not do to become a member of the French Academy? The buffets of a literary career are more severe than those of fortune, yet what land has greater patriotism than Bohemia? A statesman for fame and power, stimulated through partisanship, will hazard his life, his reputation; while the fierce spirit of business makes the drudgery of industrial life as pleasant as the dreams of youth; and the soldier willingly jeopardizes his life for military glory. The life of the artist, the literary man, the scientist, the social reformer, is a new kind of existence independent of the awful struggle for existence we see everywhere in modern civilization.

IV

It will not be difficult for the race to develop mental,

*"The dunces who abuse science, reproach it also for having destroyed ideals, and having stolen from life all of its worth. This accusation is just as absurd as the talk about the bankruptcy of science. A higher ideal than the increase of general knowledge there can not be. What saintly legend is as beautiful as the life of an inquirer, who spends his existence bending over a microscope, almost without bodily want, known and honored by few, working only for his conscience' sake, without any other ambition than that perhaps one little new fact may be established, which a more fortunate successor will make use of in a brilliant synthesis, and insert as a stone in some monument of natural science? What religious fable has inspired with a contempt of death sublimer martyrs than Gahlen, who sank down poisoned while preparing the arsenious hydrogen which he had discovered; or a Croce-Spinelli, who was overtaken by death in an over-rapid ascent of his balloon while observing the pressure of the atmosphere; or an Ehrnberg who became blind over his life work; or a Hyrtl, who almost entirely destroyed his eyesight by his anatomical corrosive preparations; or the doctors who inoculate themselves with some deadly disease—not to speak of the innumerable crowd of discoverers traveling to the North pole and to the interior of dark continents? And did Archimedes really feel his life to be so worthless when he entreated the pillage bands of Marcellus, "Do not disturb my circles"? Genuine, healthy poetry has always recognized this and finds its most ideal characters, not in a devotee, who murmurs prayers with drivelling lips, and stares with distorted eyes at some visual hallucination, but in a Prometheus and a Faust, who wrestle for science, i. e., exact knowledge of nature." *Degeneration* by MAX NORDAU, p. 110.

moral and social institutions, if we could only for the nonce get the world's attention turned away from the material, not only the commercial and business interests, but in mental, moral and social departments of life, for materialism occupies all of life. Everything is measured by money. Such institutions as that of chivalry show us what men can be taught to love and live. Of all the intrinsically foolish lives the individual has seen fit to live, throughout the entire history of the race, the property conception of life to-day, with its fierce gambling spirit (being the instinct to produce and save, which the race's life depended on in savagery, but which to-day shuts out the light of literature, science, art, religion) is the most pitifully absurd to one competent to take a general view of the history of the race. To-day the race, just on the verge of socialization, is denied it on account of the very instinct that made socialization possible at all, the instinct to produce and save wealth. But possibly just before the discovery of the use of iron there arose some seer who saw the possibilities of the race in subduing all nature, if it could overcome the difficulty of physical subsistence, and probably despaired of ever seeing it done; but the discovery of iron made the future subsistence of the race a surety; or just before written language was invented, no doubt, some great seer saw the climax that human development had reached, and the need of written language, and its possibilities, and despaired of ever realizing it, for no great invention is ever perfected in one age; but language was invented, and the human race became human. So to-day, we are upon the verge of another epoch of greater and grander development, the democratization and socialization of the race, and the fear that we will not realize this acme of human perfection causes trepidation amongst all the choice spirits of humanity. But as all the great epochs of development in the past were crowned with success in the fullness of time, so will ours be successful.

When a theory of things commensurate with human aspirations, a scientific social sense, is presented to the race, it will call into new life all the dormant religion of the human heart, now repressed by narrow creeds, individualistic aims and lack of intellectual sanction, and the individual will react to it as inevitably as ever an oppressed and wearied world reacted to a gospel of glad tidings. Then a social organization will be produced by this wonderful dynamic, religion, which will conserve all the energies of the individual by directing them into channels of greatest economy, and a life be realized limited only by the possibilities of the matter and energies of nature.

Owing to the narrowness of our theological social sense we underconceive everything, but nothing more so than the inherent potency of matter and energy to originate the highest forms of organization. It will be scientifically demonstrated some time or other in the future that every star in the depths of space is a solar system, which at some time or other of its existence is destined to be the home of intelligent beings. It is just as natural for matter and energy to develop into animals, men, and human society as it is for it to develop elements, chemical compounds and plants; and but for our erroneous theological social sense, we would see it at once. There is every reason to believe that some of the planets of our solar system are now inhabited by intelligent beings, and that the others will be as the elements and energies abate in intensity during the cycle of the universal process. In the case of Mars the great canals discovered by Schiaparelli are evidence that the Martians have reached a degree of social development at which they have made the entire planet habitable by an equalization of temperature. This will be the condition of the earth when it is controlled by a social organism, guided by a verifiable social sense, and bound together by a religion based on scientific morality. The condition of the other planets of our solar system is not so

easily determined. It is possible, in the case of Jupiter, owing to the largeness of its size, cooling more slowly than the other planets, that it is not habitable by intelligent beings now, but what a wonderful home it will be some day for the intelligent beings that will inevitably be evolved there! It is also possible that some of the outer planets of our solar system have passed through their stage of producing intelligent beings and are now, like our moon, incapable of life or civilization.

The time will come when our race will devise methods of communicating with other planets and other solar systems. The universe is inhabited and nothing but our petty theological social sense could ever make man believe that all the starry hosts were made to light his steps by night, the glorious sun to light his work by day. That the race may ultimately gain a conception of the infinite universe itself is among the grand possibilities of the future. That a great scientist like Alfred Russell Wallace should think that our insignificant earth is the center of the whole universe, shows how the theological social sense returns in old age to destroy the work of one's matured manhood. It is a sad fact indeed, and is one of the great causes of the slowness of human progress. The great Newton spent his last days writing a commentary on the Book of Daniel!

The belief in an omnipotent God is an unconscious prophecy of what oriented, democratized and socialized humanity will be and will accomplish. It will be omnipotent, supernatural and omnipresent! Some day humanity will be a god, not for the purpose of being worshiped, but a god in power, a god in love, a god in sympathy, a god in intelligence. Every human being on earth will be a conscious unit in the social organism, and the power of society will be so great that it may be able, not only to determine geological phenomena, but also astronomical. The universe may yet be destined to undergo changes at the combined efforts of its

intelligent beings. When mind really controls the universe, the solar system and the earth, if ever, they will be vastly different from what they are to-day. The improvements that unified and socialized humanity will make in the earth will cause it to be another planet, a veritable paradise from what it is to-day, fresh from the blind battling of natural energies uncontrolled by intelligence.

CHAPTER XVI

THE GOD AND IMMORTALITY HYPOTHESIS; THE THEOLOGICAL SOCIAL SENSE.

I

The generic misconception in understanding the universe is man's misconception of matter, as being dead, inert mass, when in fact it contains within itself the factors of everything we see. As the savage, on account of his ignorance, could not conceive how the north wind blew without Boreas behind it, or how the thunderbolt shot without Jove back of it, so civilized man must put God behind what he cannot understand; yet, from time immemorial, man has done away with his gods one at a time by discovering that what required a God for its explanation could be accounted for naturally; that instead of God being back of some given phenomenon, it was caused by something altogether different. If every cause requires a cause, then what is the cause of the First Cause? Can't you see that this is but the East Indian's explanation of the support of the earth, that it rested on the back of an elephant, which rested on the back of a turtle, and then ceased answering any more questions?

The primitive concept of things, that they are created and maintained by a god, is totally erroneous. The problems of existence are not solved by putting the function of God more and more into the background, into the realm of the mysterious, the metaphysical; but when the hypothesis of God ceases to explain the facts to reject it altogether. The race may as well give up God and acknowledge it, as to really give Him up as we have done to-day, yet pretend not

to do so, for nothing is gained by burying our heads, ostrich-like, in ignorance, moral cowardice and hypocrisy. If there is a God anywhere to frustrate nature at any moment, there can be no science. Science is based on the theory of things—that everything in the universe is subject to law. It reduces everything to efficient causes, bases everything on facts. There can be no God if science is true, and no science if there is a God. Omar, when he burned the Alexandrian library, was perfectly logical. He said: “If these books contain the same doctrine as the Koran, they cannot be of any use, since the Koran contains all necessary truth; but if they contain anything contrary to it, they ought to be destroyed; and, therefore, whatever they contain, I order them burnt.” If theology is true, science is foolishness. Admit the claims of science, and theology goes; but not religion, for it is based, not on theology, but on morality, the relation that the individual sustains to society. Society is the supreme authority in morality, not God.

If there is no God, why not say so? If this primitive theory of things is false, why not tell the truth about it? Thousands of years ago the writer of the Book of Job said: “Canst thou by searching find out God?” Is it not wonderful that this question has never been answered in the affirmative? Is it not passing strange that a being so believed in, so worshiped, cannot be found? As important to man as God is, there should be no doubt about His existence. Really the first condition of a God’s being useful is to have Him perfectly believed in; and how can one believe in a God and not know positively He is in existence? If there is a God, His existence could readily be established by any one of many tests, but none have ever been able to prove His existence. Why does not the church have a test case, as did Elijah of old, when he demonstrated the superiority of Jehovah over Baal? The existence of God, no matter how important, is left to faith. The theologian says: “The ways of God are mys-

terious. Though he slay me, yet will I trust him." Such a spirit accomplishes nothing in the twentieth century. It is well to cling to principle, though it slay one—that is religion; but instead of dying to prove the existence of a fact, it would be better to look and see if it exists. One's death proves nothing. Facts are proved by observation, experimentation, comparison and verification, not by sacrifice. If God stands allegorically for the race, then the psalmist is right. Though the race slay me, yet will I trust it; because persecution for righteousness' sake arouses the instinct of religion, and one ceases to be an individual and blindly sacrifices his life for humanity.

The sacredness of God comes from the sacredness of the human tribe. All gods are heroes or the worship of the elements personified. The object of all religion is primarily to protect the tribe by invoking the ancestor and worshiping the elements, thus binding the tribe together. It is all blind, as all instincts are blind.

Religion with the advent of Christianity lost its primitive tribal function directly and performed it indirectly by protecting the tribe through the individual. It became a God-worship in truth and in fact. Instead of aiming directly at the salvation of the tribe, it aimed directly at the salvation of the individual, and thus saved the tribe, the nation, the race. This change in religion was natural. The tribe had grown to be a great nation, and a constant menace to the tribe did not exist; and to give religion an individualistic turn, by making the individual owe allegiance to an ideal God, bound the whole nation together as the primitive ancestor worship bound the primitive tribe together. But the old tribal form of religion is still strong within us. How quickly do all attempts upon the life of the state meet with enthusiastic, not to say fanatical, opposition. How intensely are all reforms of the state and church opposed. Religion is still a blind instinct, and all efforts to understand it

scientifically are resented as sacrilege and meet with anathema; yet such a reform to our age will be no greater than was that of Socrates or Jesus to his.

The sacredness of God comes from man's moral sense, the moral sense being due, not only to living humanity, but to dead humanity; God being some dead hero deified, which the individual still believes lives as a God to punish him, as a living king could punish him if he knew of his disobedience to the race. In fact, to-day the moral sense is still developed by appeals to the imaginary world of gods. But let the race once see that the moral sense can be best developed by living humanity through punishment and reward, then it will discard its belief in imaginary deities, as it has the rest of its primitive beliefs which were thought to be equally potent in their day—oracles, dreams and signs.

There are many important conceptions of God that can be appropriately interpreted by substituting the moral sense as created by humanity in their stead. The same Book of Job says: "The fool has said in his heart there is no God!" This means that whoever denies the reality of the moral sense; whoever says that there is no retribution for one's sins, is a fool. Now if society did not furnish this retribution by placing in one a conscience to condemn one, indeed there would be no God, and sometimes this occurs even to-day; but no matter whether the fool says there is no God, and knows there is no God, as many of them do to-day, nevertheless, society within one, in the form of conscience, acts as a God and brings every one to an account. Every notion of God can be traced to its development in society, living and dead, the real world about us, the imaginary world of our deified ancestors, whence sprang all the gods. God is an allegory of the real facts of social life

The belief in God reaches its priceless value by being associated with religion, the average person believing them to be inseparable. If traced generically to its source, it will be

found that the emotion of religion is invariably produced by an act, a belief, or a feeling that subordinates the individual to society, often sacrificing him to it completely; and when this is consciously known, then religion will become differentiated from the mass of superstition surrounding it, beliefs in gods, immortality of the soul, and be consciously produced as any other emotion by its proper stimuli.

The God and immortality hypothesis of the universe, as a social sense, should be discarded, for it is now tacitly disbelieved by all enlightened persons. It is not fair to the great mass of humanity, which unaided is incapable of arriving at a true social sense, to be taught these old myths, and thus live a misconceived life. It is not fair to posterity that we interpret these myths in the terms of our truest thought. The question is not to be settled in maudlin, cowardly sentimentality, which urges, even if the belief in God and immortality is not true, that it does not matter to the masses whether they know the truth or not; that it is such a joy to them to believe in a beneficent God and an everlasting life, that whether false or true the belief should stand. No doubt there is much joy in these beliefs; but think of the horror in the opposite beliefs of a personal devil and an everlasting hell! All the joys of a beneficent God and an everlasting life pale into insignificance beside the sublime horrors of an everlasting burning hell and a personal devil, who goes about like a roaring lion seeking whom he may devour! That there is anything gained in believing a falsehood after the truth is known is absolutely false. It is through the truth that humanity adapts itself to nature, and it is through the truth that the individuals of society adjust themselves to society, forming a perfect social organism; and if falsehood be allowed to take the place of the truth, only maladjustment and misery can result.

I define the truth as the most perfect correspondence that can exist between the mind of man and external nature,

and between the moral and social senses and society; and the truth is known by rigid verification through observation, comparison and experimentation. If the human mind is dominated by fundamental errors, such as a belief in God and the immortality of the soul, man can never know what nature really is or adapt himself to it, or form a perfect society and adjust himself to it; for by adopting these beliefs he is using this life as a preparation for one to come that has no existence, instead of using this life as an end in itself to be lived for itself. A perfect social sense, discarding the beliefs in God and the immortality of the soul, will adjust man to society as perfectly as the intellect adapts him to nature. The adjustment of the individual to nature by the intellect differs from the adjustment of the individual to society by the social sense in this, that the intellect in the form of instinct manifests itself independent of experience, whereas the social sense is exclusively a product of experience, education and living in society. Again, the intellect in the form of education adjusts the individual to nature consciously, whereas the moral sense adjusts the individual to society blindly. But the progress the race will make when the individual is able consciously to adjust himself to the race, through the moral and social senses, will be incalculable, and humanity will become a social organism, run by conscious intelligence instead of by blind instincts, as to-day.

If the Western nations could free themselves from a belief in God and the immortality of the soul, a belief in the devil and everlasting hell (for we should take the bad of theology with the good, and not as modern hypocrisy attempts to do, hold on to God and the immortality of the soul and leave the devil and everlasting hell with other outgrown superstitions)—then they would really know that the factors in the phenomena of nature and society are not due to some unknown God, but to natural and determinable human ener-

gies which can be known and understood and directed as natural physical energies by laws and institutions invented by man for universal human welfare. Man's life should be made up of the living of this life for all it is worth. Life is not looked after by God, but is a result of human instincts, of human knowledge and human emotion. The moral and social senses should be consciously developed in each individual as the intellect now is developed. The moral and social senses and not God will be the salvation of the race. All the love and respect that man now bestows on an imaginary God can be readily transferred to living humanity about us. All the glories of immortality can be realized here on earth.

II

If there was a God, would we see the cruelty, the bestiality among men that we now see? Would the assassin's hand not be staid? Would not the drunkard's career be stopped? Would the insane be allowed to kill their victims? Would the treacherous friend be permitted to alienate the affections of the wife and accomplish her ruin? Would not innocence be protected from vice and sin, and not be led astray to depths of degradation unspeakable, as a lamb to the slaughter? Would an all-powerful beneficent God permit this? Would He build a world in which it could occur? Would a just God let men's hearts be so hard, their love of greed so ruthless, their thirst for power so violent, their hunger for success so unscrupulous? Never do we see the hand of God! Where is the divinity in the insatiableness of man's animal passion? How kindlier has nature been to the elephant! No harassing passion year in and year out, but at an opportune time, then its brief day and rest. The stern law of the survival of the fittest fixed this yoke upon mankind, not in malevolence, but necessity. The mammoth pachyderm can better perpetuate its kind under an

intermittent passion, man under a constant one. No God is responsible, but necessity.

Think of the horrible accidents that could have been averted by a sign, a token, a word? If there is a God, He never interferes in the affairs of men. He has set the world to going and has gone away and forgotten it. No matter the prayers! No matter the sacrifice! Jesus on the cross! Socrates in the prison cell! Our God has deserted us! Is it not a kindlier theory to think that there never was a God than to think He is not so good and true and beautiful as poor struggling and hoping humanity?

Look at the nations of the earth in their various careers. What did Babylon, Nineveh, Egypt, Greece, Rome do that they should perish like the great animals and plants before man was evolved? Why should the Jews, the chosen people of God, be scattered over the world? Why should Poland be dismembered? What merit has England that she should own the earth? For originating, even in this civilized age, her strenuous game, the man hunt, in which poor weaponless savages are shot down in sport. How nobly has her great philosopher Herbert Spencer taken her to task in his *Principles of Ethics*! Did ever a people pray more fervently than did the South African Boers, and yet God let them be conquered by the most ungodly nation on the earth. The United States started on a career of liberty for humanity in liberating Cuba, yet day by day she is being deflected from her noble course by the commercialism and materialism of capital, until in her control of the Philippines to-day moral ideas are of no avail unless in accord with the accumulation of property. Is all of this God's will and wish? Where is the hand of God helping the weak, restraining the strong? Did our God ever come down on the field of battle, and with His hand sweep away the hosts of tyrants who were oppressing patriots fighting for liberty, for home, for fireside? Never! Ruthlessly the victor tramples the helpless victim

to death. Starving women and children, the aged and the wounded, perish unhelped. God's hand is nowhere seen, yet never did more fervent prayer ascend. There is no God in the affairs of men or in the destiny of nations.

Where do we see God in the long history of humanity? In the stone age, the bronze age, the iron age? Did God give man the use of fire? Did he show our savage ancestors how to smelt iron? Did God teach man to talk and think? Did God show man the importance of property? Did He invent marriage? Who was it who taught man that in order that property might become fully developed, at first, it should be made individual instead of communal, now social instead of individual, was it God? Did God invent religion, or did man, in the infancy of the race from sheer necessity, develop the instinct to protect the tribe, and in the struggle for existence between tribe and tribe, perfect it until we see religion to-day unifying and making the race one vast organism, greater and stronger and better than a belief in God ever created? There is no sign of God in any of these devious evolutions of arts and institutions. Is it to Kliesthenes and Servius Tullius or to God that we owe civil government? Where did God teach man anything? Moses simply codified the laws he learned from the Egyptians. Was it not the necessity of the conditions confronting the human race from its beginning up to date that gave rise to all we are and caused man himself to originate his arts, institutions and knowledge in the past just as he does to-day? God had nothing to do with it. God himself is an invention of man.

If there is a God, why does not He reveal Himself to us in terms so clear that no one can mistake the evidence? What good can be attained by ever retreating into mystery and ignorance. And if God did once reveal Himself to mankind, why did He not make His revelation so perfect that there could be no mistaking it as divine? The imperfections of

the revelations of the Bible show their human origin. Higher criticism has shown the Bible to be of purely human origin, and that God had nothing to do with it; but the critics will not speak out any more than the Greek and Roman scholars would expose the gods of their country.

Either God deceives all nations and peoples, else He has revealed Himself to all in contradictory terms, or has been partial in His revelation. One consultation with the scientists, statesmen, artists and business men of the world would settle the matter forever. He could call a convention any place. We would all be there. He could outline the eternal principle of things, and we would no longer live in doubt, fear and uncertainty. There is no God, else He would not conceal Himself more perfectly than the utmost secrets of the universe.

And if man is immortal, why not give him the evidence of it? The return of one person from the other world who would tell us what immortality is, not in a darkened room, but in the broad daylight of open space, would settle the question for all time. Let him talk to them who knew him, as Jesus did to His disciples after the resurrection. One such case to-day with our scientific safeguards would be sufficient. But God could give us many, and why not? Because the soul is no more immortal than anything else, and nothing is immortal but the elements and energies of primitive nature.

To primitive consciousness, back of every phenomenon, is a God. As man learns, he dispenses with his gods, until the time comes when he traces the facts that give rise to the God-idea to society, and thus dispenses with all help from an ideal God to explain the phenomena of nature. God, like Jove, Jehovah, Mars, is one of humanity's primitive gods. The word God is derived from Woden, Wod, God. But how reluctantly do men give up their theological beliefs. Long after they have ceased to believe in the God-hypothesis of the universe, they still use the word in some figurative sense.

Spencer calls God the Unknowable. The great pagan, Robert G. Ingersoll, called God the Power back of things. Hegel called Him the Absolute. Sir William Hamilton called Him the Unconditioned; Plato called God Logos, and so on. Readers must not have their feelings hurt by not having God come in in some place. There are few scientists but use the word; however, it is always in some department of science they know nothing about. None accept the God-hypothesis and reason from it; for that would upset all science.

Why not say what one thinks? Is there anything gained by treating humanity as we treat children, deeming them not old enough to understand all kinds of knowledge, keeping them in the dark until they find out knowledge in error and sin? The very life of the race depends upon the telling of the truth; for there is no other way under the sun to adjust humanity to its environment except by the truth. All the nations of antiquity went down to destruction simply because they were not able to adjust themselves to their environment; they could not give up their erroneous beliefs. It has been simply a matter of knowledge. Each nation, as it lived in history, took what its predecessor left, and lived as best it could. Those who have lived the most nearly to the truth have lasted the longest. Our fate is before us. It is either scientific truth or destruction. Take your choice.

But the punishment heretofore meted out to anyone who dared to tell the truth about God and immortality was so severe, so disgraceful, so painful—oblivion, death, obloquy—that no wonder men held their peace! Think of the horror that Jesus must have felt while on the cross! No wonder He cried out: "My God! My God! Why hast thou forsaken me!" The despair of that cry! The shame of the death, the same as on the gallows to-day! Oh, what a price He paid for speaking the truth as He saw it! And how many are there since His day who have not been so fortunate as to

have history right them in the eyes of posterity, but stand as malefactors, traitors, criminals to the race, when in fact they, too, were saviors? No wonder that our great men are time-servers, hypocrites, pharisees, moral cowards! We begin pledged to speak the truth fully, freely, heart-deep; but for the sake of wealth, position, fame, we compromise, clothe the truth in orthodox language, live respected, hold professorships, offices, sinecures! What a price Schopenhauer paid to speak so all posterity would hear him! What a price did Comte pay for founding the science of sociology, the science of human salvation! And all who expect to live in what they write must be equally fearless, equally courageous, equally truthful, equally free! And let come what will, abide the issue!

The scholars of the world from time immemorial, the scientists, artists, literary men, business men and statesmen of the world have held the God and immortality hypothesis only as a matter of policy. They speak by implication; besides, it is so much easier to exploit the ignorance of humanity than to suffer ostracism by advocating the true theory of things. To a mind that has any logic about it, it takes no great reasoning to show it that modern science is directly opposed to the God and immortality hypothesis. The modern state is based upon the theory that theocracy is false. Governments are based upon the real world and not upon the imaginary world. Modern civilization has really rejected the God and immortality hypothesis, and pays homage to God by lip-service only. Civilization is really a gigantic system of hypocrisy. The best Christians do not begin to compare with the best stoics during the Roman Republic. Christianity has sunk deeper into disrepute and contempt than paganism at Christianity's advent. As the ancient Roman paid his respects to the gods to set an example for the populace, so do the professions and classes to-day; for what care they for the truth, so they get an easy

living out of humanity? The church has no power, is satisfied simply with feeding her great mass of incompetent and ignorant priests and preachers. No able man ever stays in the church now except by chance; then he tries to read into her old dogmas the truth that is to take their place. True religion finds no home in the church except by accident. The great religious hearts of humanity to-day, feeling that Christianity is a failure, are striving blindly to alleviate the ills of humanity without any consciously thought out philosophy, in countless reforms, social settlements, philanthropy, socialism, some trying to drag the church along with them; but the church itself is the first to cry out against any real change in the existing evils, the first to detect progress and to denounce it. The church knows how to preserve existing institutions, the primal function of religion; but knows nothing of the perfection of humanity through knowledge, the cardinal function of religion to-day. Why should a Christian care to see a perfect system of life here on earth when the fundamental doctrine of Christianity is a perfect life beyond the grave to compensate for the evils of the one here? No good can come of the church so long as it is hampered by the erroneous doctrine of the immortality of the soul.

All the great hopes, aspirations, inspirations and longings of the human heart have been aroused by the possibilities of matter and energy, and are capable of realization here on earth. Heaven is a belief that cheats us out of our birthright, and gives us a shadow for the real thing. The perfect state can and will be realized here on earth and not some place else. The dreams and imaginings of our fathers, of the poets and the prophets in all ages, are destined to come true in our own lives. Heaven is the future home of the race here on earth, when it is controlled by the moral and social senses; and the power of God is a prophecy and an allegory of what the power of socialized humanity will be. This is what the

great allegory of God and immortality means. Let us accept the truth. The age is ripe for the change.

The Dark Ages are attributive to the teachings of Christianity that this life is naught but a preparation for a life to come expressed in countless tenets which destroyed the instinct to originate property, such as, "Take no thought of the morrow," "Sell what thou hast and give to the poor," "How hard shall it be for a rich man to enter the kingdom of heaven," and countless others, all expressing contempt for this life, some going so far as to teach that those present would live to see the end of the world. Such beliefs, if universal, would destroy all civilization. It was the general belief of all Christendom that the world would terminate at the end of the first thousand years of the Christian dispensation. Such doctrines destroyed the primal incentive to produce, to accumulate; and if all of our hopes, aspirations, longings are to be achieved in heaven, what is the use of exertion here? After these doctrines became universal, as a result, the Dark Ages followed; and but for the Crusades, which killed off all of the most fanatical believers and awakened those who remained at home with the classical knowledge brought back from the East, the race to-day would still be following such suicidal doctrines. As the thirteenth century rejected the literal teachings of the Bible, so should the twentieth century reject the figurative teachings. There has been a gradual lessening of the effect of the imaginary world, gods, dreams, upon the human race since the dawn of history, and the time has come when the destiny of the race demands that these beliefs be openly abandoned, that civilization be based upon the real exclusively; for it can never reach the acme of its development any other way.

III

The superstition of savages really produces a purer form of religion than does the church to-day. It is true the doc-

trine of the brotherhood of man has done much towards civilizing the Western World, but in practice to-day it is utterly disregarded, so that it does less to bind the race together than the greed of property, which wishes all men to be brothers so that they can the better use one another. The savage's superstition protects the individual from outside evils and preserves order within the tribe. Our theology does not keep us from going to war with one another, but drives us to war by justifying imperialism, because it gives missionaries opportunities in hitherto inaccessible lands, the Philippines and China. What a spectacle to see the English Empire and the Boer Republics praying to the same God for victories! Such a belief is a gigantic, real farce. Our theological social sense not only fails in its dealings between nation and nation; it does not secure justice between man and man, but permits one individual to exploit another, or, for that matter, whole nations, and promises the abused, the oppressed, justice beyond the grave, well knowing that none will ever get back to tell of the cheat!

It is the function of the social sense not only to protect nation from nation, and nations from outside evils—not an angry God and an inimical nature, but other nations—by showing all nations that humanity is one, that the only way for any one nation to reach perfection and happiness is to raise all others with it. Our theological social sense is absolutely incapable of accomplishing this great desideratum. Man must become socialized by realizing that the interest of all is the interest of each of us; that it is just as impossible for one social unit to be perfect and happy in an imperfect and unhappy social organism as it is for one unit in the animal body to be well, healthful and at ease when the body as a whole is disorganized and diseased.

Man must become socialized and know that coöperation is more economical than competition; that peace is more profitable than war; that war is just as hurtful to the victor as to

the vanquished; that it is an anachronism, and has no sanction in a socialized man's religion; that it originated when the race was in the tribal state and in early formations of nations, and served its purpose in effecting coalitions by force before the dawn of knowledge, before the origination of a scientific moral sense, and now must pass away, or else it will dissipate the energy it has conserved by turning upon itself and, Rhea-like, devouring its own progeny. War should pass away with slavery, human sacrifice, cannibalism, its companions in the vicissitudes of human development. And when one reads of war and the horrid implements of war, and listens to jingo agitators, one should classify them with the advocates of slavery, human sacrifice and cannibalism; for each of these horrible practices has been beneficial to the human race at different stages of its development, and because war is the last one, it is no more useful and necessary to-day than the rest.

The object of the social sense to-day is to unify the race, and this cannot be accomplished so long as all the surplus energy of the race is used up in wars and preparation for wars; yet this most important truth has never dawned upon the theological social sense. If the really moral persons of the race could only see that it is the real function of the social sense to adjust man to society, and nation to nation, by intelligence and morality and not by force, and rise and demand of our savage governments that it be done, not a century would elapse before the race would enter upon its ultimate standard of living. But with the church guarding its dogmas inherited from our barbarian ancestors, considering the keeping of them of more value to the race than the knowing of verifiable truth, there is no hope for humanity through the theological social sense. The gradual growth of knowledge, which undermines these old beliefs and destroys them despite all care and protection, has reached a stage in development at which an intellectual

invoice of what the race believes should take place; then these old beliefs would be relegated to the column of loss, and the entire capital of the race be invested in a scientific social sense.

A belief in God and the immortality of the soul robs life of reality. We cannot possibly know what we are so long as we start out with theories which stop thought at the very beginning. The human mind and human endeavor are held in bondage to-day by concepts inherited from our savage ancestors. Oriented humanity can read what the race is in nature and history. There is no room for God in nature except as an idle observer sitting by and watching the wheels go round. We can see no such being any place in nature; there is no necessity for such a being, and there is no evidence that He exists. God as conceived by our ignorant ancestors is a great King (for they knew nothing of republics) who made the universe as a man makes a machine, and set it going as we start a watch, and then went away and left it as a child deserts a toy it has become tired of. None but a child-mind could have originated such a theory; and we would not believe it to-day but for the fact it is the answer to our first questions in infancy and our last question at death; but for the sanction of the church and the teachings of all ages down from our savage ancestors who originated it; but for the primal fact that it has been our social sense for ages, and upon it the stability of the race has depended; and for the cardinal fact that of all things the race has seen fit to do to perpetuate its existence, none have been more imperative than uniformity of belief, hence the individual instinctively believes, upholds, defends, and, if need be, dies for the social sense of the nation in which he happens to be born, no matter how absurd or simple it may be, or how grand or sublime. And for these reasons our theological social sense, despite all of its defects, still holds sway. Humanity is innately conservative.

As the knowledge of man grows the use of God is pushed back further and further into the unknown. God was once necessary to explain the most insignificant phenomena; but is now used only to bridge the supposed chasm between the organic and the inorganic, and between mind and matter. Since monism has become the accepted philosophy of science, the function of God is now pushed back to the Unknowable, the noumenon. Society is known to have had a natural origin. Logic ought to show one at a glance that the God-hypothesis is erroneous, born of a savage brain, and finds no place in the scientific thought of to-day. Only for the instinctive, powerful and sublime faith of man in the absolute utility of religion and his belief in the impossibility of disassociating it from a belief in God, the God-hypothesis would have disappeared long ago. Man has always believed that with a disappearance of a belief in God, religion would be destroyed; hence to abolish the belief in God would be to destroy religion, and to destroy religion would be to exterminate the race; so no wonder man has been true to his theological social sense, and is still true to it to-day regardless of its absurdity, its falseness, its impotency; and no wonder he brands opposition to this great belief as impiety, sacrilege, infidelity.

But the real sacrilege to-day is to let religion rest on fictions, when it should rest on facts; to let it rest on a belief in God and immortality instead of a scientific social sense, resulting in scientific morality—all actions and beliefs that protect, perpetuate, develop and perfect humanity, producing a religion of morality instead of one of blind faith and senseless ceremonies. Despite the tremendous obstacles, it is the duty of all to clear away these old myths, and put in the mind of man the great facts of nature and society; then the secrets of the universe will be known to all and society be a perfect organism; and man will be coördinated to it with a religion that will have all the power of the fabled gods,

because it will be directed by a scientific social sense, and all the energy of nature and society will be expended with the greatest possible economy resulting in a unity of race, in a perfection of humanity, in the achievement of the ambitions, ideals and hopes that God and immortality are but a prophecy, a dream, a vision of.

So strangely do the institutions of the race have to pervert themselves before they become extinct that to-day the pseudo-godly men do ungodly deeds through laws and institutions in the name of God. An ungodly act, one inimical to the welfare of the race, is best protected by being done in the name of God, the figurative expression for the welfare of the race; and what more ungodly act can there be than that of keeping the race from knowing the facts upon which its very life depends? The same is true of unlawful acts; they are best protected by doing them in the name of the law. Immoral acts are best protected by doing them in the name of morality. And all this occurs every day. Things go by names, and no matter what the act, if it be given a good name, it is a good thing; and no matter how good the act may be, if it is given a bad name, it is a bad thing. This is true when the race is effecting the transition from control by the imaginary world to control by the real world. What more irreligious thing can one think of than the church in the days of Luther, yet at its heart was a kernel of real religion, for it bound the race together, no matter if it violated every principle of justice and right.

It has ever been that real religion has been persecuted by the false; and true religion to-day will meet with the same fate. Let the genius point out the falsity of our institutions and take his fate. The religious reformer has nothing to fear from the irreligious men about him; but the pseudo-religious man, orthodox and respectable, enthroned in power, who always strikes down all truer and better forms of religion as a matter of self-preservation. Buddha

met with this opposition; Mohammed likewise; and Luther, Knox, Calvin, and Wesley. It is a universal process. Well might one think the millennium had come, if the social sense in vogue were to accept a higher conception of the social sense from any of the specialized individuals without a struggle; but alas! this is not the method of nature in perfecting the race even in the twentieth century, as witness the persecution of Tolstoi in Russia and social reformers the world over!

The church of the Middle Ages is accused of selling indulgences; what of Protestantism to-day? Does it not profit by all kinds of *lawful* wrongs and never raise a voice? Does it not accept blood money from all kinds of nefarious schemes that oppress and exploit the people? Such an institution cannot be reformed, it must be differentiated from; and just as Christianity supplanted paganism, so will science supplant Christianity and the school supplant the church.

The false, imperfect and incomplete conception of religion and its function taught by the church is only seen when looked at in the light of science, history and philosophy. Owing to the absurd theology that goes along with it, the moral teachings of the church, even when they are good, are of little effect. First, because a moral life is not at all essential to a religious life in the church, its primal doctrine being that the individual is saved by faith, not by service to the race; and secondly, because the church is sectarian, exclusive, does not include the whole race. Imagine the social sense of a primitive tribe that did not include every individual of the tribe! The religion of the church misses the chief function of religion, that of binding the race together into one organism. First, because it is not based exclusively on morality; secondly, because it is not based on a true theory of things, a scientific social sense.

In every hamlet there are persons who live openly in rebellion to the mental and moral teachings of the church.

Instead of making them a part of society, the church excludes them. The world at large is oblivious to the teachings of Christianity so far as practically living them is concerned. The social sense of theology can never again become so rational and so useful that all classes, conditions and qualities of men will voluntarily listen to its teachings; and it cannot perform the essential functions of a social sense until these requirements are met. The individual is too intelligent to believe any longer in the teachings of the church.

As the Western World stands, there is at least half of the race without any acknowledged social sense, the unbelievers, the agnostics, skeptics, persons of all classes in life and condition in culture; then a vast mass of believers in the church's teachings who are not doers, persons whose conscience does not make them live up to the teachings of the church; these are really the truest believers, they are not hypocrites, but backsliders! Then there is another large class that may be called sinners, and often criminals, who are totally without the pales of the church, yet believers, who go through life acting in opposition to their consciences, and never performing or trying to perform any duty religiously. Think what this kind of life means, when religion is seen to be an essential instinct of social life, as much so as the instinct of self-preservation is of the individual life! No man can live without religion except by promising himself that at some time in his life he is going to change for the better. Such a life as this will be impossible under scientific moral and social senses, for they will organize the individual with humanity, and religion will be experienced by every one in proportion to his service and sacrifice to the race, none being left out, none going unrewarded. To live a life devoid of religion is not living at all, and subjects such persons to all manner of violent experiences, hardships and calamities, often ending in crime, insanity, suicide. All of

this can be avoided by simply teaching the true function of religion, letting the outcast classes know that the race as a whole is one, and that they are welcome to enter into it, be coördinated with it, and live the life it suggests; that all energies can best be expended under social direction, and that the happiness secured, true religion, is the greatest man can experience.

How many hungry souls have gone in vain to the church with its petty and inane worship of God, its base conception of this life, with its exaltation of the life to come, in the hopes of meeting with a fellowship world-wide and heart-deep, and have met defeat because of skepticism of the theological dogmas upon which the Christian religion depends! Religion should be within the reach of all, not for the asking, but as a result of one's education and training, one's conduct, one's service to the race; then in the hour of temptation, when one's individual nature tends to acts inimical to the best interests of the race, in opposition to one's social nature, one would be sustained by the emotion of religion, and act according to his social nature, to the best interests of all humanity.

To-day a great underlying, unconscious feeling of religion sustains humanity in spite of the petty religion of the church with its exclusiveness both intellectual and social. It goes under the name of goodness, philanthropy, heroism, patriotism, duty, kindness, humanity, charity, love and morality. The religion of the church is chiefly superstition, fanaticism, bigotry, prejudice, hypocrisy, phariseeism. Its members obey with a motive of fear, not love. Its joy is a sense of freedom from fault, relief from having done an irksome task; not an exhilaration of joy at having expended energy in the most economical manner possible. It is true, when one lives up to every requirement of the church, and knows nothing of the religion of morality or a scientific social sense, that the church satisfies one's religious nature;

but in the vast majority of cases it is only an excuse to satisfy one's religious instinct, not a function in the expenditure of human energy along the line of the least resistance with the ultimate purpose of perfecting humanity.

IV

What can be more absurd than the modern worship of God? First, songs of praise set to tunes of love addressed to Almighty God, then a rambling prayer, thanking God for various benefits and asking for more, but tacitly doubting their ever being granted by saying: "Thy will be done, not mine!" Then a sermon of still more praise, followed by a benediction, with expressions of delight from the audience as it passes out that it is all over. Or take mass in the Catholic church. If God were present, what would He think of it? Is not this petty entertainment for a God? Our talk to an infant is certainly foolish, our talk to one we love is rather silly, but our worship of God, looked at in the light of reason, is the most absurd of all! The savage feeds his god with a sacrifice, which the priests sneak in and get when the tribe goes away. Modern man takes up a collection. Is not this the main object of the service after all?

Really what should worship be? Was not the Greek theater, reciting the deeds of heroes in its tragedy, satirizing the foibles of the people in its comedy, preferable? The people of to-day think so from a comparative attendance of the theaters and the churches. There are some things in human life so sublime that a recital of them might be pleasing even to Deity—a history of a life-long service to the race; a recital of the fundamental truths of nature and society; the story of the coöperation of humanity in subduing nature; a picture of humanity when controlled by the moral and social senses, and unified by the religion of morality—anything would be better than what we have.

If man was a thinking animal, if religion was not an

instinct blinder than love, then man could see the absurdity of the Christian worship of God. Society has made the common man absolutely oblivious to the imperfections of the social sense so long as it is in authority; and if some one does not speak out and take the consequences, this church mummary will pass for a social sense for ages yet to come. It does not satisfy man's conscience, for not one man in ten ever goes to church. It does arouse the emotion of religion, as does the faithful use of the rabbit's foot amongst our colored brethren. But that man's religious nature cannot be satisfied with such stuff as this is shown in the horrors of modern life—insanity, crime, sin, suicide, oppression, tyranny, injustice, inequality, disease, vice, and all the other unsocial ills that imperfect society to-day suffers under our theological social sense, which neither adapts man to the race nor the race to the environment, and which makes life as blind and as unintelligent as when we were savages roaming the plains of Western Europe twenty centuries ago. Under the true social sense every member of society will come under the survey of the race, be taught from infancy up the way to live—not as some careless God has taught, delivering His message to an ignorant and savage people, but the constant revelation of truth as discovered by the mind of man in contact with nature and society. Then the life of the individual will not be a preparation, but an end; and to live will be a joy, not a trial; and society will be an organism with known structure and known functions, and religion will be the result of social service to the race.

Christianity is fundamentally wrong to-day in its concept of salvation, in that Christian salvation is individual, not social. The race as a whole is either saved or lost. Had not humanity been able to keep up true religion under the guise of many other emotions, it would have ceased to be an organism for want of the cementing power of true religion. But always we have had going with our theological social

sense true goodness to save mankind. It is impossible for Christianity to become social, and for that reason it should be discarded.

The greatest imperfection of the church is that, owing to its lack of intellectuality, it is separated from the school. The basis of the school, its fundamental principle, should be the religion of morality, but the church, owing to its intellectual imperfections, and the school, owing to its being denied the right to teach the religion of morality, both fail in developing true religion, and are inoperative institutions. All the morality a vast majority of people get they pick up, imbibe, learn from experience in life. It is the great instinct of religion, the instinct to protect, to perpetuate and perfect society, coming out in spite of the church and the school, which gives stability to civilization to-day. It will be this religious instinct that will purify the church or else do away with it. No wonder the world is full of woe when the school attends only to man's intellectual nature. The school of the future will be chiefly engaged in developing man's moral and social nature, instead of his intellectual nature at their expense. No wonder at the misery of life, when the church, the institution that gives expression to man's moral life, teaches that this life is a preparation for a life to come, depreciates this life into insignificance, thus handicapping those who believe in it most, by unfitting them to live, and benefiting those who disbelieve in it, by permitting them to take advantage of the unwary Christian.

Morality is taught by that care of man for man as seen in family relationship. Religion in its first form is love of kind, responsibility for kind, obedience to kind, fear of kind when retractable, seen in the primitive tribe. Nothing is more inimical to true religion than the spirit of modern city life, which cares nothing for those about one, and lives independently and outside of all restrictions. All aristocracy, class-society, smart sets, four hundreds, nobilities, are

intrinsically irreligious. The same is true of the bitter spirit of the business world. It is utterly incompatible with true religion. Imperialism, commercialism, materialism, capitalism, the struggle for existence, the inveterate spirit of war—all are antagonistic to true religion. True religion to-day is a product of peace, refinement, culture, intelligence. It is born of thought and sympathy. It is inseparable from morality, race-producing, race-developing, race-perfecting conduct. It is the invariable accompaniment of a high life no matter how lived.

Nothing is truer than the precept: "Believe and thou shalt be saved!" But to-day it is not the belief of existing Christianity that will save one, but a belief in a social sense consisting of verifiable, public, corporate knowledge, which, when realized in laws and institutions, will control all of the energies of man with perfect economy. The state will be based on verifiable, public, corporate knowledge, not the state of the nineteenth century, nor the church of the Middle Ages; but a state which will combine the holy purpose of the church with the avowed utility of the state, realizing the prophecy dimly adumbrated in the state of our primitive ancestors, wherein politics and religion were one and the same thing, and once more making service to the state duly rewarded by religious ecstasy, disobedience followed by despair, shame, death.

The church to-day cannot preach absolute obedience, for after nineteen centuries she stands condemned by disobedience. It is true to-day that our scientific knowledge as a social sense can scarcely be said to be an eye with which to see the way social energy should be expended, yet even imperfect as it is, it demonstrates the inadequacy of Christianity as a salvation for the race. The church preaches a remedy for social ills, which has been tried for nineteen centuries, and ever found to be a failure; but such is the inability of the race to throw off its effete social senses, that

each new generation tries the old remedy over and over again. The orthodox church to-day can do nothing with the problems of the present, because it has no ameliorative ideas to execute. It has tried every remedy it has, and the race is still a very sick man. Its guidance of human energy does not result in that economical expenditure of energy required by the moral sense in order to have peace and progress in society. The church cannot save, because it has no saving ideas. The time has come when Christianity's unverifiable beliefs do not fit the individual's acute intellect and bind the race together; for the individual's intellect has outgrown Christianity, and the church not only fails to continue the development of the individual, which it so gloriously began, but gets in the way of any other institution, the school, for example, designed by science for that purpose. It is impossible for the individual to believe in the church any longer. Agnosticism is the creed of modern man and the first opposition to the church that is perfectly respectable. However, the church still has the allegiance of a goodly portion of Western civilization, because of what it has accomplished, and because man is not a thinking, logical being. Since its beginning Christianity has made wonderful metamorphoses, becoming all things to all men in order to win them; and its future existence depends exclusively upon whether or not it can become the organ of science. If it can, as in the past, the church will divide the executory functions of society with the community and the state; but if the church cannot become the organ of verifiable knowledge, then it will pass away, as have all other effete institutions of the race, and the school will take its place.

What a privilege, if on each Sunday, one could attend some church and hear a discourse by some chosen scholar on some of the moral and social problems of the ages, to be followed by a discussion by chosen leaders. Such a system of worship would be consonant with democracy; would be

acceptable to the whole human race. It would emphasize the equality of man, the denial of privilege. The theater should become a place of instruction as well as amusement; become a religious institution as it originally was, and men instead of spending their leisure time in senseless eating and drinking, as they do in saloons, hotels and gardens, should take delight in solving the great problems of life, mind and society, subjects that should always be open for discussion and investigation, and be the source of the second greatest pleasure known to human life, intellectual emotion at the discovery of truth, and only surpassed in ecstasy by the emotion of religion in the service of humanity. The greatest entertainment a people can have is that of discussing monistic concepts of nature, life, mind and society. Man by nature is a philosopher, but the thought-stopping social sense of theology blocks all investigation of nature, life, mind and society from a naturalistic point of view by settling all investigations with one invariable answer, God made everything, and there the discussion ends. But monism once more opens up the universe to investigation, and one of the greatest delights is to acquire the knowledge the race has accumulated on any subject and add one's own increment, let it be fact or theory. Our system of education is now a painful process, simply because the mind is not turned loose to find, or is not led into acquiring the real knowledge of nature, life, mind and society. Investigation of these cardinal subjects is stopped by saying: "God created them. We cannot know how. But study this dead language or that; this abstract science or that, and you will get a degree." Education, instead of being the greatest delight outside of religious service to the race, is one of the most painful operations our youth are subjected to. Education will be one of the great occupations of the race in ages to come, when all the earth will come under the rule of the race, and nature in all of her forms be perfectly familiar to every one.

V

The great protection and perfection that religion gives man to-day is within society, and not without, as it was when religion was meant to shield man from nature and hostile tribes. It is through religion that social justice will be secured. Law cannot reach the oppression of modern tyrants. The moral sense will have to be developed by a scientific social sense, so that it will be to the individual an all-feeling sense of touch that compasses the entire race, making it an organism sensitive alike in all of its parts, so that a wrong done to the simplest individual will be as hurtful as one done to the greatest; then an injury to the race will be an injury to self, and human energy will be expended along the line of the least resistance, thought out by the social sense, determined, not so much by external coercion as by the individual's own sense of duty and conscience. Nothing but a religion based on enlightened service to the race can produce the democratization of humanity. So long as the church maintains its present orthodox, unprogressive, incapable-of-enlightenment position, it will be impossible for it to foster true religion; but instead, it will be a harassing bar to all true religion. The greatest opposition that true religion has always met with has been from the orthodox religion it came to take the place of. It has been so in all ages, in all climes, and it is so to-day.

As the church used the temples of paganism, so in the coming ages the true religion will find temples in Christian churches. And just as Christianity lived beside paganism for over three hundred years unknown, unseen, unnoticed, so has there grown up in the Western World a great scientific social sense, as yet unorganized, the school being its incipient organization, that will take complete charge of modern life, as Christianity took charge of the Roman Empire in the fourth century. The church's hold upon the world is purely hypocritical. Real belief in the Bible ceased

to exist hundreds of years ago. The Reformation was the first expression of the new social sense; modern representative government the second, and the science of to-day the third and last. Modern science has completely supplanted Christianity as a social sense, but we do not let ourselves see it clearly. The school has really taken the place of the church. Where do we get our concept of things? All that is needed is a Constantine to proclaim the advent of the religion of morality to the race. We are ready for it. And as paganism disappeared, so will Christianity, leaving all that is good in it behind. It may be painful to the sectarian to think his loved sect must give way to the true philosophy; but in the history of humanity such a catastrophe has occurred more than once. Think of the radical change Constantine introduced into the Roman Empire! Some day we will have a modern Constantine in the form of a free people who will have the courage to proclaim to the world that the old dogmas are dead, and that henceforth the principles of science are to be the guiding star of Western civilization; that in place of having a religion based on faith, we will have one based on morality, service to the race; and the heavens will not fall at the announcement, but instead there will be a great enlightenment to the whole race; the scope of human thought will be widened, the human horizon broadened, and human feeling extended so that it will comprise the entire race, and ultimately the democratization and socialization of humanity will be accomplished.

If all this is so, why have none spoken it before? It has been spoken by implication thousands of times, and no doubt many of my readers will wish that I had so spoken it now, for then this book would have greater vogue, be more respectable, and they could afford to be better friends to it. But the time has come when some one should speak out in plain, unmistakable language. Everybody is entitled to the truth. What has deterred others? Let an author speak his

mind and who will read his book? What kind of people are his friends? Jesus associated with the blind, the lame and the halt, the poor and despised classes not from choice, but because no one else would associate with Him. Socrates was considered a loafer by the better citizens of Athens, and had inexperienced youth for his companions. Even to-day advanced thinkers are considered cranks. The author who dares speak his mind has the pariahs of the earth for his friends.

There is a purpose in the indirectness and obscurity of great writers. The language of philosophy conceals much more thought than it expresses. Diogenes says of Plato: "He employs a great variety of terms in order to render his philosophic system unintelligible to the ignorant." When the Grecian philosopher Stilpo was asked by Crates: "Do the gods delight in adoration and prayer?" He answered: "Do not ask these questions, you foolish man, in the road, but in private." And when the Grecian philosopher Bion was asked whether there were any gods, answered: "Will you first, O miserable man, remove the multitude?" If any of our statesmen were to speak in public what they really believe about God and immortality, they would forever keep silence and never run for office again. Our public men are compelled to be hypocrites. To what office might not Robert G. Ingersoll have aspired and have been elected had he bridled his tongue? His associates all thought as he, but said nothing. They sat in high places as their reward. Always respect the religious beliefs and practices of a people if you would be popular with them. Woe to the religious reformer, woe to the iconoclast, woe to the innovator! The world places a prize on hypocrisy.

Is it not a sad commentary on the twentieth century that no man holding the most advanced thought on any subject dare express it? What a shocking thing to know that knowledge is mistrusted and superstition and hypocrisy rewarded!

What a pleasure it would be if one could go into some temple each Sunday morning and hear preached a religion based on the service of man to society, a philosophy based on the relation of man to nature and society! Oh, if one could listen to the true philosophy of religion! How the instinct arose to protect the tribe! How it lives to perfect the race! How the democratization and socialization of humanity will be accomplished, when a verifiable scientific social sense is realized in institutions motived by true religion!

This will be called impiety, certainly. Martyrdom has been the fate of many who have dared to teach the race its highest moral concepts, its greatest ideas. The idea of God is held so sacredly that to explain it on naturalistic principles is a sin against the Holy Ghost. Sacrilege is not to deny the existence of this imaginary world, but to deny the power of society, the social world, in which we live, and move, and have our being, and which conflicts with the imaginary world of God. Sacrilege is to deny the power of the moral sense. If we let the imaginary world stand, it becomes impotent through disbelief, and the moral and social senses cannot take its place on account of public moral cowardice. Hence we have the condition of affairs we see to-day, men thinking they are very good citizens, because they believe in God, yet constantly acting against the best interests of humanity. A man may be a saint in morals, yet if he openly rejects Christianity he is called an infidel, and becomes incapable of holding any office of trust and profit, denied the privilege of teaching in the schools or writing for the press, and is generally a man to be mistrusted and avoided, especially by our youth. On the other hand, no matter what a man's conduct, so he is fairly decent about it, and provided he is loud-mouthedly orthodox in his faith, he has the world open to him. The theological social sense rewards hypocrisy and punishes candor and honesty.

The time has come to abandon the imaginary world and its ruler, God, and let the facts determine our life, trace all emotion to its true source, and fearlessly live and speak the truth. Many men heretofore have rejected a belief in God, Ingersoll, Voltaire, Kant; but they have always had a string of hope tied to it, and at the grave, or in the presence of the vastness of the universe, or the sublimity of moral responsibility, have pulled it back again. The conception of God and immortality is only allegorically true, and must be done away with, and the true conception of the moral and social senses, of the religion of morality, of the all-sufficiency of nature, be put in its stead. It is absurd to think nature other than it seems. To bring a God on the scene only complicates the problem and makes it absolutely insoluble; for we cannot know anything about God after postulating His existence, except what we guess, and no two guesses are alike.

But there are those who will say it is best for man to be so placed in darkness to work out his own salvation. Whether it is best or not such is the fact; only man was not placed in darkness but developed out of darkness, first into the light of intellect, then into the light of the social sense. We have traced the evolution without the hypothesis of God. Assume a God in nature, and everything is chaos; for would an omnipotent God take a hundred millions of years to make a man? Why use the God hypothesis at all? When we know what matter is, when we know what energy is, there is no use having any other factor to explain every other thing. God is an unknown letter in the problem that heretofore has stood for our ignorance, and can be dispensed with to-day now that we have the knowledge of science.

Everything that we see that is good, great, sublime, even divine, nature has slowly evolved out of primitive elements and energies. Nature is not another term for God, but consists of the elements and energies constituting the universe

in their ceaseless interactions, during the universal process. It is to humanity that we owe civilization; not to God. It is the hand of humanity that we see stretched out to the erring, the unfortunate, the oppressed, not God's; and not that of His followers either, for who are more ruthless in the destruction of life than kings and emperors who rule by divine right? It was not God who unfurled the Cuban flag, but generous, liberty-loving man! It is not God demanding freedom from the tyrants of Europe, from materialistic despots the world over, but loving, religious man. It is to man we can trace everything great in civilization. It was man who originated religion, morality, knowledge, institutions, the fine arts, civilization—all that is useful, good, true and beautiful. It will be man who will realize the socialization of the race. It is humanity that responds to our aspirations, that satisfies our longings, that gives us incentive to live, and makes life worth living; that gives us the only immortality known to nature, to live in the human race in thought and blood; that takes the place of God in religion in uniting the race in a body politic, and fills the function perfectly. It is humanity that develops in us the moral sense which feels the whole race as one great sublime organism. It is humanity that teaches us the social sense which shows us our relation to the race and its relation to us, makes us a unit in the social organism, giving us life eternal in the life of humanity, making us akin to our savage brother in the stone age, and our socialized brother in the coming age of democracy. It is to humanity we owe all we are or hope to be, our joys, our ambitions, our aspirations our entire being.

God is but the imaginary and figurative guardian of the race, dimly shadowing forth what the race itself was doing. Let the idea and word go. Let the race itself come into its birthright, and let the function of the race be known as it is, has been, and ever will be; and let us meet the facts of

nature and society face to face, and work out our destiny as determined by the nature of things, in the light of the social sense, not with fear and trembling, but with courage and conviction, with honest labor and manly coöperation, and be done forever with the theories of our savage ancestors, regardless of their service in the past. Then the race will speedily be socialized and democratized, and the ultimate condition of humanity on earth be reached.

Just as when we were children, we had our childish feelings agreeably shocked at finding out that the mythical Santa Claus was our dearly beloved parents, so now when we are fully oriented do we again have our feelings agreeably shocked at finding out that God, a kind of greater Santa Claus, is only a symbol, an allegory for the great human race; and that the race stands as the correlate to man in all of his needs of a higher, a deeper, a broader and a purer life; and that the one revelation no more than the other has a deleterious effect upon us, but instead a beneficent one, for love is always stronger when directed toward a known object than an ideal, and so is its higher form, religion. The happiest day in the philosopher's life is when he sees this great truth; and it will be so with all of us despite the fears that superstition arouses, despite the prejudice of conservatism, despite the jealousy of self-interest. The abiding peace is the monistic philosophy, for when nature, life, mind and society are interpreted in its terms, this is the language of eternity, and nothing can rob us of the joy it brings; and the dread and fear we feel to-day, when protecting our theological social sense, Christianity, from the ceaseless attacks of the individual's intellectuality, will be unknown; for the social sense of science will be based on real facts, and not on an allegory or symbol of them. At last the individual's discovery of truth will be harmonized with society's protection of truth. The intellectual anarchy of the race will end, and the thought of the race, its knowledge, will be organized

in a system of monistic philosophy in which every fact will find its place and every hope its correlate. Instead of being a catastrophe, which our superstition makes us dread, there will result the most glorious success the elements and energies of nature have ever achieved—the socialization of the race.

CHAPTER XVII

ASPECTS OF SCIENTIFIC MORALITY

I

The theological social sense takes no account of social responsibility. The individual is responsible to society, but society is not responsible to the individual. Individual responsibility is based upon the famous theological doctrine of the freedom of the will; society is not deemed to be responsible to the individual, because social responsibility is beyond the conception of one starting from the principles of the theological social sense, it being impious to say that God is responsible to man for anything; God in the theological social sense taking the place of humanity in the scientific social sense.

The discussion of responsibility leads to an examination of the doctrine of the freedom of the will; for it is through the freedom of the will that the individual is supposed to be responsible. The primitive form of the will is chemical affinity. In its developed forms it is appetite, desire, will, love, religion. Primarily it has to do with self-preservation; secondarily, with reproduction, and thirdly, in the form of religion, with the protection, preservation and perfection of the race, society. The highest form of will is religion. Religion is to the social organism what will is to the animal organism; one is the basis of self-preservation, the other is the basis of social preservation. It makes no difference in what form will is manifested, it is always statical in its function, that is, it always results in order; yet it is the motor power of the universe, the dynamic of the universal process. It has to do with the law of internal repetition.

It preserves the form of things. It perpetuates them. It saves them. In humanity, in the form of religion, it is the salvation of the race. Will is the basis of all order, yet the motor power of all progress. It is the persistence of forms in chemical compounds, the law of heredity in organic compounds, and the basis of order in society.

Internal energy is the basis of all movement in the universe. All external energy does is to direct internal energy when it is not determined by its own contending forms. In physical inorganic nature external energy is simply the conditions of internal energy in the form of matter. In organic nature, external energy, in the form of intellect, directs the internal energies to the advantage of the individual organism. In society, external energy, in the form of knowledge, directs internal energy in the form of religion. All change is effected by external energy, but the dynamic is internal energy. When these two forms of energy reach a moving equilibrium there results an organism, the animal organism and the social organism. Each of these two forms of energy has many manifestations, but their characteristics are always the same.

Nothing is free. Everything is limited by every other thing. But whenever in the course of the universal process an organism is developed so powerful, consisting of such an interminable chain of causes and effects, that it comprises within itself not only its own life, but the inherited lives of all of its ancestors in the form of mind and the moral and social senses, and through its mentality and sociality is so powerful that it is more than able to counteract all other stimuli and influences in determining its actions, it is said to be free. Such a being is the individual to-day, and in time the social organism will be another, only infinitely greater. But to understand the human will it must be considered as it is, a natural energy.

The will in nature devoid of senses follows the line of the

least resistance, determined only by the contending energy, the parallelogram of forces, acts as a chemical energy, and is a chemical energy. With the development of the senses the will is guided into the channel of the least pain and the most pleasure; with the development of the intellect it is guided into the channel of the greatest economy from the point of view of the individual; but with experience in society there is developed the moral and social senses, and the will, in the form of religion, is guided through them into the channels of the greatest possible economy from the point of view of society, and reaches the greatest degree of freedom possible in all nature in the perfect individual. Through the intellect the animal organism has the power of varying its actions by substituting past experience in the form of ideas for present stimulus. The will is free from present experience by being situate in an organism that can use the residua, not only of its own experience, but of all the past experience of its ancestors, as recorded in its brain structures, to determine each and every one of its actions; nevertheless, the animal's actions are invariably the result of efficient causes, though many removes away, and all that the wonderful apparatus of mentality does is to secure the most economic expenditure of energy possible from the point of view of the individual organism.

Freedom consists in being able not only to let the facts, ideas, in one's own life determine what one shall do when contemplating a given action, but being able to determine the action from the instincts and structures one inherits from one's ancestors. This choice of method in the expenditure of energy is the freedom of the will, and differs only from the blind expenditure of energy of inorganic nature by multiplying the number of the possible lines of expenditure of energy. The line of the least resistance is taken in each case, only in the case of the animal there are more oppor-

tunities of expenditure, and in the case of the perfect social organism still more opportunities of expenditure. One is held responsible to choose the most economical method of expending energy possible from the point of view of the individual, and if one does not he is said to make a mistake, is ignorant, or insane. Society is held responsible to choose the most economical method of expending energy from the point of view of knowledge, the social sense; and if it does not the resulting civilization is barbarism, savagery, semi-civilization: civilization depending upon the amount of knowledge society uses in expending its energy until socialization is reached, when society will expend all of its energy according to scientific knowledge, and the greatest economy of energy possible will be reached. In physical inorganic nature there is no choice in the method of the expenditure of energy, there is no mistake, all action follows invariably along the line of the least resistance of the contending energies determined by the one experience, the one stimulus.

When the expenditure of human energy is controlled, from the point of view of the moral and social senses, when internal energy reaches the developed form known as religion, then its expenditure is capable of the highest possible degree of economy; for then it can be expended solely for the good of the whole human race as determined by the highest form of knowledge, realized in the greatest institutions capable of being invented by man. Society in this form has never been realized; but it has been prophesied symbolically in all the religions that have created great nations.

In human society the individual is held responsible for the expenditure of his energies, not from the point of view of his intellect, his individuality, but in opposition to it, from the point of view of his moral and social senses. Man's social nature opposes his individual nature, and furnishes him forms of expending energy in opposition to it of the

utmost utility to the race; such forms being all of the virtues, in opposition to the expenditure of energy through his individual nature, ending in all the vices. In this highest form of the expenditure of human energy the whole mechanism of society is within the individual in the form of his moral and social senses, his social nature, and if he does not expend his energy in accordance with society's forms, his conscience coerces him with the most acute pain known to human nature; and if he does so expend his energies, then duty rewards him with the most exquisite joy known to the human heart, religion. The individual's responsibility to society is thus established.

Considering the will from the point of view of the past, with its accumulated avenues of expenditure, beginning with its primitive form as a chemical energy, following the law of action and reaction, and ending with a religion based on morality, determined by the social sense of scientific knowledge, comprising all of the concepts the human race has been able to accumulate in its long history, each successive generation of the race makes the will more and more subject to the past; but, considering the will from the point of view of the present, it is this very subjection to the past, consisting of ideas, knowledge, laws and institutions, that gives the will its ability to expend itself in less and less resisting channels, so that freedom of the will does not mean human energy that is completely undetermined, but human energy with the best possible determination. Freedom is a growth, an organic product, a social achievement. The individual is free through ideas; society is free through knowledge, institutions, laws. The individual without ideas, and society without knowledge are chained by the physical laws of motion, and as a result waste their energies in opposition and neutralization; but with ideas and knowledge, they expend their energies with the greatest possible economy and attain what we call freedom.

II

In whatever way an organism acts once, it has a tendency under similar conditions to act in the same way again. In time this tendency becomes a habit, the habit grows into character. The individual is responsible for his character, because through his intellect he can vary his actions, and his actions determine his character. A person's character is the residua of all of his actions. No one starts with a bad character; we start with none. Actions from our animal nature are all we are able to perform at the start-out of our existence, for society has had no opportunity to develop our moral and social senses, so naturally our actions in infancy and youth are not so good as in manhood and womanhood. As the individual's embryonic development is an epitome of the animal series whence he sprang, so his infancy and youth are an epitome of the race, beginning in savagery; and if there is normal development, ending in perfect socialization—a life motivated by true religion and guided by science. While the individual inherits the character structure of his ancestors, yet through the wonderful apparatus of his mentality, this structure is adapted to whatever kind of social organism in which the individual may happen to be developed. Character is a product of actions, as knowledge is a product of experience and education. It takes one just as long a time to become good as wise; and one is no more a result of the will than the other.

Character is the great safeguard of the individual in securing happiness in life, for by it he can insure himself against taking a line of action not fully in accord with his moral and social senses, so that when some great temptation comes he will be able to withstand it, whereas if it had come early in life before he had developed his character he would have fallen. Owing to our theological social sense being so wide of the facts in nature and society, so untrue, one's character

receives little help from general education, when character-production should be its main object.

The moral sense directs human energy into certain channels, the virtues, by the imposition of punishment, imprisonment, disgrace, death, as a penalty for expending energy according to one's individual nature; or by reward of preferment in society, honor, fame, power, for virtuous actions, energy expended according to the moral sense. At the beginning the punishment and reward are external, but such is the nature of nervous tissue that external energies registering themselves in it leave residua of themselves, which, after years of development, have the same function of controlling and directing internal energy as the external stimulus had at the beginning; so there grows up in us a court of punishment, due to external punishment, in the form of the acute pain of conscience, and a court of reward in the form of self-approbation, self-approval, the ecstasy of religion, to determine the expenditure of all the energies of the individual in his myriad actions. There is nothing mysterious about this origination and development of the moral sense. It is the way the senses and the intellect were developed in the animal organism, only the energies acting as stimuli are different; and it is also the way the social sense is developed, only the energy producing it is also different. To this particular property of nervous tissue, that it is able to register external stimuli, and that the residua are able to perform the function of the original energies, is due the senses and the intellect, and the moral and social senses of man. But this property of nervous tissue is only a highly developed trait of all matter. In physical inorganic nature it is seen in the property of matter that receives external energies with, no doubt, slight tendencies to registration; in organic matter we see it produce the senses and the intellect; in society we see it produce the moral and social senses. Nature is one. There is nothing new under the sun; only duplications and reduplications.

Man's individual nature and his moral nature are antithetical. While his individual nature is responsible to society, his social nature is responsible to his individual nature. An individual who is all vice and sin suffers from the stings of conscience, his moral nature demanding the performance of its functions; an individual all virtue and holiness suffers temptations, his individual nature demanding the performance of its functions. There is an adjustment between man's two natures, by his social nature taking control and permitting individual functions within certain prescribed limits. All actions outside of these limits are crimes, wrongs, sins. That a man can sin on the side of virtue is a proposition which, so far in the history of the world, has never been upheld, nevertheless, it is a fact. If the animal functions of the body are not performed within prescribed limits they react upon one's social nature, and one deteriorates morally by trying to be too moral. One's individual nature is not to be despised because it is subordinate to his social nature. The proper adjustment of the two natures results in the highest form of life, not the exclusive living of one's social nature. Here is where Schopenhauer went astray in pessimism.

Morality, due to the moral sense alone, is no more competent to direct human energy successfully and economically than touch in the animal organism without the assistance of other senses and the intellect is able to direct its internal energies successfully and economically. If there were no other method of guiding human energy than by the moral sense, society would stop with guidance from present feeling, and civilization would be forever, as it is now, a blind conflict. Just as the animal organism utilizes past experience in the form of ideas and instincts, so the social organism uses past experience in the form of knowledge, the experience of the individual with the race stored in language and institutions. Society will some day see its way. Char-

acter is to the individual organism what institutions are to the social organism; and as character is a result of the actions of the animal organism, and the animal organism is responsible for its character because it can vary its actions through ideas; so the institutions of society are a result of the actions of society, and society is responsible to the individual for its institutions because it can vary its actions through knowledge and thus create institutions that will secure the most economic expenditure of energy possible. Thus responsibility both individual and social is a matter of knowledge and not free will. Or it is knowledge that makes man free; for all that knowledge consists of is different methods of expending energy, and all that freedom consists of is being able to expend energy along the line of the least possible resistance. Man is responsible, not on account of his freedom, but on account of his knowledge; for it is his knowledge that makes him free. The same is true of society

III

As the individual is responsible to society for his character, because he can vary his actions through his intellect, and thus determine his character, so society is responsible to the individual for its institutions, because it can vary its actions through knowledge, and thus determine its institutions. In society to-day the individual is ostensibly responsible for his actions; but he is really responsible for his character, because it is character that makes one virtuous. Virtue is a question of heart. The substance of sin and crime is not to be caught and convicted, but the desire to wrong some one, the wish to expend one's energy inimical to society whether one does it or not. It is the mental thief and dishonest man, and the psychically unchaste and deceitful woman that are really the most sinful and most criminal; for they think they are virtuous and upright because they

have not acted out their vile characters, whereas those who have fallen may have fallen, not from lack of character, but from hard adverse circumstances. Morality is psychical, not physical. A person may live an apparently blameless life and yet be morally rotten. Too much of our virtue is lack of opportunity, cowardice, impotency. The truly moral person is one who has been tried, and even fallen, yet lived and loved the virtuous life. It is character as well as conduct that should be used in classifying human beings.

On the other hand, society is responsible for its conduct, no matter the form of its institutions; for a nation may have democratic institutions and yet indulge in the most tyrannical and unjust treatment of the masses. It is what a nation does, or permits, no matter the form of its institutions, that brands it as savage or crowns it as civilized; and England cannot have one pauper in every five persons in the city of London, or the United States, through unjust laws, let the producing class retain but one-fifth of the fruits of its labor, and still stand before the world as not morally and socially culpable, no matter their protestations of being the greatest nations on the face of the globe. It is facts as well as institutions that should be used in classifying nations.

There is this difference between individual and social responsibility; society controls the individual primarily by force, whereas the individual enforces his power over society by ideas. Society makes the individual conform to it by physical coercion; the individual makes society conform to his ideas by mental coercion. This conflict is going on constantly in a thousand different ways, but is only noticeable when some great individual arises and takes the race by mental storm and changes it to his way of thinking, as an Aristotle, a Bacon, a Marx, a Comte, a Darwin. More often the race controls the straying fancies of the individual, and makes him feel and think along conservative lines.

But while society primarily coerces the individual by

force, yet it is the greatest teacher, because it makes its assistance to its pupils unnecessary in that its teaching creates within us the moral and social senses, which become so acute that society is perfectly reproduced in us; and it is utterly impossible for our individual natures to expend their energies in opposition to society, for there stands the all-feeling heart of the moral sense and the all-seeing eye of the social sense to detect and condemn us or to approve and reward us. Society's coercion begins with the physical, but ends with the highest form of the psychical.

And while the coercion of society by the individual is mental at the start-out, yet society always resents it by physical opposition. The facts of nature or the hardships of life originate in some specialized individual a great idea or an acute moral sense, and he promulgates his views to the world. If he is a common individual and his ideas are not wide of the type, he is ridiculed into conformity; if he is a great individual, has a deep insight into things and civilization, he is persecuted by neglect, contempt, then physical opposition, which often ends in death, martyrdom.

The race's effect upon the individual is static; the individual's effect upon the race is dynamic. The race holds the individual responsible for order; the individual holds the race responsible for progress. The individual is called a reformer. The race's curbing action upon the individual is conservatism. The race seeks to maintain the type of the species. The individual seeks to vary it.

At one time in our lives the racial tendencies may be strong, at another the individual. Charles A. Dana in his youth was a member of the Brook-Farm experiment. In his old age he was bitterly conservative. Lincoln when a boy wrote a book similar to Tom Paine's *Age of Reason*. He became a deist and believer in prayer towards the latter part of his life. Bismarck was a radical in his youth, but madly conservative in his old age. The same is true of Edmund

Burke. Often the father will be the radical, the son the reactionary, or *vice versa*. Witness Marcus Aurelius and his son Commodus, and Robert G. Ingersoll and his reverend orthodox father.

The race is certainly responsible to the individual. He may not be able to establish the doctrine, but he often enough gives his life in attempting it. Just as a teacher looks upon a pupil with shame who does not acquit himself creditably, so will society some time look with shame upon all unhappy and imperfect individuals. The disgrace of the crime will not only be with the individual but with the community at large for producing conditions that make crime possible. The time will come when social consciousness will be as sensitive to individual acts as individual consciousness is now sensitive to individual acts; then social responsibility will be equal to individual responsibility, and the moral and social senses will not only control the individual, but society as well. Now society controls the individual by the moral and social senses; but then the moral and social senses will be perfect, and all human energy will be expended along the line of the least possible resistance, and social control will be perfect. We see adumbrations of this coming society to-day. With what shame does every community in the United States look upon an instance of mob law! Is not the ignorance of the Russian peasant a disgrace to all Russia? And is not London's poverty a disgrace to all England? The world as a whole should be ashamed of its theological social sense, with its lack of intellectual support resulting in our horrible adjustment to nature and society, poverty, the struggle for existence, panics, and war!

The reason we cannot think out a perfect system of society is on account of the many thought-stopping theories in the social sense of to-day, Christianity. We do not look at nature, life, mind and society from a naturalistic point of view, and we cannot; and when we attempt it, as I have in

this book, there comes crowding into our thought here and there reminiscences of the old theory to mar the expression of the new. It is impossible for one holding the theological social sense to understand the relation that society sustains to man or man to society, because God stands for society, and it would be absurd to say that omnipotent God is responsible to man. Society and the individual are mutual creators, and hold to each other mutual responsibilities. It is true that in the past the doctrine of social responsibility has not been developed, because it has not been differentiated from responsibility to God, the figurative representative of society; still the individual in all ages has maintained his belief in social responsibility by dying a martyr's death in trying to establish it.

It is almost impossible to get man to attempt to conceive what society really is. He is so fond of stopping with explanations beginning with himself instead of ending with himself. But the time will come when man will contemplate the phenomena of his own nature and the phenomena of society as a product of the crude workings of the ceaseless adjustment of the energies of nature, and trace everything to its primal source; and he will see through nature, life, mind and society as we now see through a product of art. Then the social organism and the animal organism can fix their respective responsibilities unincumbered by anything but the facts, and the perfect expenditure of energy will be reached.

IV

Christianity as a social sense is largely unsocial. It completely ignores the organized existence of society as a factor in individual development. It does not recognize that governments can do wrong. The king is of divine appointment. Primitive Christianity solved the problem of expending human energy by refusing to expend it at all. But such a

suicidal social sense as monasticism could not possibly last very long, and Christianity has gradually abandoned it, until to-day there is no difference between a Christian and the most extreme worldling. Christianity has much to say about what the individual shall do for society, nothing about what society shall do for the individual. It is well enough adapted to unenlightened peoples, living a simple existence, understanding things only symbolically; but for oriented humanity, living in a vast and complicated civilization, it is absolutely inadequate. Christianity should be rejected because it does not meet the requirements of a world-religion. It does not protect, develop and perfect the race. Social responsibility has been the demand of the individual through the ages. Time and again has he given his life to establish his right that society shall conform to the highest concepts of the way human energy shall be expended. The struggle is still on. The hope of the race is to make society amenable to progressive verifiable ideas, as the race has always made the individual amenable to law, order, right living.

With the abandonment of a belief in God, the individual can consciously discover flaws in society, where heretofore he did so only instinctively; for God being deemed perfect and the author of everything, how could the clay turn upon the potter and criticize Him for His workmanship? But when everything is known to be a natural product, due to the blind battlings of the energies of nature, man has a right, not only to improve nature (no doubt once considered sacrilege) but to improve himself (also once sacrilege) and most of all to improve society, to improve his moral and social senses, which is sacrilege to-day. It seems preposterous for the individual consciously to point out the imperfections of society and demand perfections; but under scientific moral and social senses we will see the imperfections of poverty, the struggle for existence and war disappear, and coöperation, peace and socialization will follow.

It is a natural right of the individual that all social institutions be a product of public, corporate knowledge, as it is a natural right of society that the individual's character be a product of actions guided by the highest concepts of right and wrong, truth and error, concepts realizing the greatest economy of energy, the highest concepts derived from verifiable representations of nature and experience with human feelings and human ideas. It is a natural right of the individual to demand that the institutions controlling him be not incrustations from the dead past, but flexible institutions based on verifiable knowledge, which will direct the energies of society so that the individual will have the greatest possible scope for the development of his nature both individual and social. It is the right of the individual to demand that the social organism of which he is a unit be of as high a form of development as its factors are competent to make it. It is a natural right of the individual to demand of society that its life be as pure, as high, as intelligent, as perfect, be as free from the tragedies of civilization, panics, poverty, the struggle for existence, war, as the individual's morality is pure, high and perfect and free from vice, sin and crime.

But there is a difference; if the individual does not live in accord with society, society coerces him; whereas if society does not live in accord with the individual's high concept of its functions, all he can do is to attempt to force it by promulgating his ideas. Such conduct often ends in the individual's sacrificing his life in martyrdom, thereby advertising the truth of his ideas, and causing all society to adopt them by imitation and thus have the race become as he would have it. This is the way truth spreads throughout primitive society. It is strange that an idea before it can spread throughout society must begin its career by causing the death of its originator. Nothing can better demonstrate the absence of all intelligence in the origination and develop-

ment of humanity. It is purely a product of blind energies.

Society makes the individual responsible to it by punishment, by injuring him; whereas the individual makes society responsible to him by sacrifice, service, work, by returning good for evil.

There is no more significant fact in all history than martyrdom. It is world-wide, and has existed from time immemorial. It alone ought to teach our rank individualists that in every human heart there dwells an instinct of fellowship, a social instinct that far surpasses the instinct of selfishness in producing happiness as a dynamic in human society. It is by martyrdom that the individual enforces social responsibility. Nothing but the blind instinct of religion could ever induce one to become a martyr. It is the greatest instinct we possess, the instinct to protect, to perfect the race by service, if need be by sacrifice; by life, if need be by death!

Martyrdom is the fructifying act of the elements of progress and the elements of order which produce the social organism. We see it throughout all history, beginning with Protagoras and ending with the persecution of social reformers the world over to-day. And the joy at this birth of the race, though the death of the martyr, is the greatest, the most exquisite, the most ecstatic possible in the nature of things. The satisfaction of the instinct of self-preservation is joy, the satisfaction of love is happiness, but this satisfaction of the instinct of religion transcends human expression. It is more than glory, more than ecstasy, more than bliss. It is the peace that passeth all understanding.

The great difficulty in the conflict between individual and social responsibility in society has ever been to make of society a moving equilibrium, the individual promoting progress, society maintaining order, growing, developing and finally reaching perfection. It is most difficult to

modify old institutions to new knowledge, the function of the specialized individual. But when the race is looked at as a whole, total change has been effected in many institutions; for example, marriage, industry, government. Who would believe that the knights of the Middle Ages could develop into the capitalists of to-day? That the Grecian love of knowledge could give way to universal love of gold? Well, as these changes have been wrought in society, may we not hope that changes equally as great for good may be wrought in the coming ages? John Stuart Mill said that men could be taught to dig for the state as well as fight for it. It is only a question of moral sense. When digging for the race is as necessary to its existence as fighting for it was—when our fighting moral sense was originated—then a moral sense will be produced which will cause men to dig and delve for the state; and this menial labor will bring the individual the same joy that the glory of war does now, or rather did when man was a savage; for mankind has ceased to enjoy war.

And the time will come when oriented society itself will change, and progress as well as order be a duty enjoined by religion in its most conservative form. Oriented society will recognize the right of the individual to demand social reform, and the anomaly of anomalies, progress, will be initiated by society itself. These are not only probabilities and possibilities, but actual certainties of the future. It is conscious control of society by knowledge that will realize individual perfection, and thereby social perfection; then the blind method of martyrdom will have ceased to be and the race will reach the same results by education and discipline. Perfection of humanity hitherto has been only a dream to be realized in another world, yet history shows a gradual evolution of the race. It is a scientific certainty that when the race is once oriented it will speedily reach perfection here on earth.

It is very necessary that at no time too great a variation

should be introduced into human institutions. If too great a variation is attempted, revolution instead of evolution results. The introduction of Christianity, blending the Hebrew civilization with that of Greece and Rome, is a good example of too radical a change being introduced into human evolution. The Dark Ages followed, and not until the last five centuries do we see any good resulting from the marriage of these two civilizations.

To-day we see scientific knowledge transforming, metamorphosing the different nations of the earth, rapidly making the world one vast social organism. Let us hope it may be done without any more retardation; that the race as a whole may learn to expend all of its energies in the most economical manner possible; that it may all come about gradually, as the growth of a child to a man, the growth of a city into a nation, the nations of the earth into a race.

V

The only way to get the laws of the animal organism executed is to have the organism execute them itself; so the only way to get the laws of society executed is to have society execute them itself. Suppose that when an individual violated one of the laws of his animal nature that his organism did not have the power to enforce its laws by causing him pain, but that the social organism, for example, would have to find out the violation and punish him for it, would the animal organism ever reach a very high degree of development through such a roundabout method of government? Would not most human organisms become extinct, because society could not protect them by the proper discipline? Or suppose the punishment was put off until after the animal had ceased to live, and be administered in another world. Would such a system of government be of any use to the animal at all? This is the kind of government the theological social sense gives society to-day. In

the face of the lack of all adequate remedies for our social tragedies, it is the teaching of our theological social sense that the source of retribution for treasons and wrongs which individuals and corporations commit against society, by using society as a means of private gain, is the God of the universe and not society itself, and the punishment is in another world, not in this. The facts are, this concept is exactly opposite to the truth. Nature enforces its laws, the individual enforces his laws, and society must enforce its laws. An organism must perform its functions or else cease to exist. There is nothing gained to-day, and much lost, by keeping up the fiction of a God-control of society, and not show how society controls itself by laws, just as natural as the laws of the individual or the laws of nature. God does not control nations, and none know it better than those who preach the doctrine most, its chief offenders, kings, emperors, rulers.

The imperfections of the social organism obscure its functions, but even to-day there is no reason whatever for retaining the theological social sense when we see that it has served its purpose and is perfectly effete. If the social organism cannot control the energies of its units so that its energies will be expended in the most economical manner possible from the point of view of society, it will cease to exist, and another will be formed out of its parts that can do so.

But, while this means that society must punish its offenders now in this life, it does not mean that society must enforce its decrees by physical coercion. It means that the social organism must be an organism complete in itself. Society's creation of the moral and social senses, whereby the individual has within his own mind the means of executing social decrees, is perfectly consonant with social control; in fact, social control cannot exist in any other way. The social organism cannot be a social organism except by

having located in each individual a sense whereby all humanity is in touch with the individual, and the individual in touch with all humanity, a sense whereby the individual sees all humanity and all humanity sees the individual; an adjustment which will result in the expenditure of the energies of the individual determined by the race as a whole. When society is constituted of such individuals it will be perfect, and the functions of the social organism will be known and performed as consciously as the functions of the animal organism are to-day.

But to-day the greatest social tragedies can exist, and society, owing to the theological social sense, makes no effort whatever to remedy them. What is the outcome? The vices and tragedies of civilization. Society is responsible for all the narrow, mean, miserable, dwarfed lives due to poverty; for society is responsible for poverty. It is the duty of society, through public corporate knowledge, to create laws and institutions which will enable each individual to produce according to his ability, and to receive from others an exact equivalent according to his services; laws that will exclude all ideas of gain except exchange for mutual services; institutions that will realize perfect morality in contradistinction to the unmorality of nature; a civilization that will realize the Golden Rule. Society is responsible for the misspent energy due to avarice, lust, fear, tyranny, treason, partisanship, superstition and ignorance; for society is responsible for the individual's knowing how to live. Society is responsible for the gilded misery of aristocracy, its ennui, its lack of noble aspiration, its gnawing fear of revolution; because society is responsible for all social control. Society is responsible for the niggardly, hard, cruel, inhuman spirit of business; because society is responsible for the enforcement of all social laws. Society is responsible for the intellectual death, the fear, the moral cowardice, the bigotry, the lack of tolerance, of charity, the

lack of humanity, the lack of true religion, and the dire hypocrisy and phariseism of Christianity; because society is responsible for the social sense and the religion of the individual. Society is responsible for the immorality, the lack of intellectuality and the low grade of life in civilization to-day; because society is responsible for its laws and institutions. Society is responsible for the right expenditure of all energy, and the sooner it is conscious of its responsibility the sooner it will bear it, and consciously remedy the ills due to its dereliction of duty by causing all energy to be expended according to public corporate knowledge, the social sense.

How many individuals in their social natures to-day feel this responsibility? Very few. It is true that many do in a vague way. They are philanthropic, charitable, public spirited. The theological social sense obscures man's social functions so he does not understand them at all. Some express their social responsibility in existing religious institutions. Others look for amelioration through politics. This is the favorite remedy here in the United States. Really, there is very little of an abiding consciousness that society itself is responsible for most of the ills of civilization. How quickly will a call to arms be responded to when made by the government at the fear of an invasion of the nation's territory! Simply because social consciousness is very acute on this point. Those nations in the past that did not develop such a moral sense of self-protection became extinct. To-day it is not foreign foes that society needs fear, but misdirected energy within its own borders. It is not sensitiveness to outside shocks, but sensitiveness to inside shocks. And the nation to-day that does not develop a moral and social sense to correspond to these inside shocks will become extinct, and the nations that do develop moral and social senses to make them aware of them will survive and ultimately reach social perfection.

Social responsibility is dimly felt by all of us, as is shown in our attempts to make and enforce good laws, to elevate the general intelligence of our country, by our taking a pride in good citizenship, and in many other ways. But man's social nature does not cry out against the misdirection of social energy as his individual nature does at the misdirection of his individual energies. The misdirection of social energy is a vague feeling, the misdirection of individual energy is an intense pain.

The man who would sacrifice his life on the field of battle to save his country from invasion, prompted by the emotion of religion (though not called by that name), to-day would unhesitatingly help to enact laws that produce panics, poverty, the struggle for existence, and death to thousands, where tens die on the battlefield. It is strange that a man could be so heroic in one case and so unheroic in the other. It is because men do not understand what life is. What the common individual needs is insight into social processes to show him that just as glorious service can be rendered humanity by peaceful methods as by war; that the most tragic wrong is death by inches, undignified and degrading, in sweat-shops, in mines and on inhospitable farms; that he who would risk his life in saving the life of another in a physical accident, or on the field of battle in defense of his country, is no greater hero than he who sacrifices his life in years of useful toil alleviating the hardships of humanity wherever they may be found, by originating institutions or by producing thoughts for others to apply. It is the hero of peace, of intelligence, of morality that the race must recognize; for it is virtue prompted by them that will save the race, not the heroism of the warrior. We are not savages that we need to fight, but civilized men who should expend our energy with perfect economy. It is the hero of thought, of humanity, of moral sublimity, of justice, of democracy who will cause the social organism to reach that degree of

sensitiveness necessary to the highest social development. With society imbued with this kind of moral service, moral heroism, life will not be a trial, a hardship, but a joy and a blessing.

And the institution, now in its infancy, which will accomplish this great desideratum is the school. When it is based on a naturalistic concept of things, when its efforts are crowned by the ecstasy of religion, the school will be to the humanity of the future what the home was to primitive man, what the church was to our immediate ancestors. It is certainly the great social institution of the future, for it will be intrusted with the development of the moral and social senses and the individual's character.

The life of the human race is yet in the future. All the great literature, art and science are yet to come. All the great achievements in government are but adumbrated in the governments of to-day. The school is hardly a prophecy of what it will be when we study nature, life, mind and society, instead of our ancestors' guesses at them. Conscious social life is just dawning. What will it be when man's social nature is as highly developed as his individual nature is to-day? Society then, indeed, will be an organism in every sense of that great word. All energy will ultimately be expended with perfect economy, and the greatest happiness to the greatest number will be realized.

CHAPTER XVIII

THE FINAL SYNTHESIS OF NATURE, LIFE, MIND AND SOCIETY.

I

The laws of nature are the invariable ways energies expend themselves in nature. While the expenditure of energy in physical, inorganic nature is always invariable, and always along the line of the least resistance, yet it is utterly regardless of economy in the sense of saving. There is no attempt at adjusting the acting energies of nature so that they will not oppose, neutralize and waste one another. There is no purpose. Nothing happens to the advantage of any other thing due to any effort of the thing itself. The universe as an organism is the least developed, the simplest of any we know. It is self-sufficing, everlasting and infinite. Our solar system is an individual organism, a unit in the vast organism of the universe. The human race has not contemplated its situation from a naturalistic point of view sufficiently to arrive at a conception of it; that will be one of the achievements of social man in the future, as the conquest of the earth has been the achievement of individual man in the past.

Order in the universe is phenomenally stable. It is estimated that our solar system has existed one hundred million years. The order we see in the depths of space is remarkably uniform and suffers little change. It is the characteristic of physical nature to vary slowly and to preserve its form for ages. In this regard it is opposite to organic and social nature. Take our solar system as an example of a

physical organism. It has existed for a hundred million of years, and will, no doubt, exist for a hundred million more. What was its beginning, and what will be its end, is left to conjecture and deduction; and the course of its cycle or life is of an interminable length of time. In comparison with the organism of man, which may last a century, or a social organism which may last a few thousand years in cycle or life, no wonder the universe and the solar system are not considered organisms. But what man and society lack in years of existence, they make up in intensity of experience, crowding into their brief cycles the infinite ages of physical inorganic nature.

The difference in the physical, the organic and the social worlds is a difference of methods of expending energy, resulting in a different system of order and greater economy in the expenditure of energy, with different degrees of evolution or progress. The dissipation of energy in opposition and neutralization in the physical world produced chemical compounds which ended in the origination of organic compounds so delicate that by taking advantage of the physical energies of nature they were enabled to vary the expenditure of their internal energy, so that it was not wasted in opposition and neutralization, but resulted in benefits and advantages to the adjusting compounds. After ages of development, through the laws of natural selection and the laws of repetition, this primordial organic compound became man. Then followed a vast age of evolution in which the social organism was developed from the organic man.

The physical, the organic and the social forms of evolution differ in the method of the expenditure of energy, in the system of order resulting and in the degree of evolution manifested. Physical nature is so simple that its laws are invariable. There is but one way to expend energy in physical nature, one avenue, one stimulus, and it is invariably fol-

lowed. This is why we say the laws of nature are unchangeable. There is none of that failure of adjustment we see in organic and social phenomena; but the reason for this is that where there is little development, of necessity there must be small adjustment. What adjustment there is, is accomplished by the blind dissipation of the contending energies taking the line of the least resistance at infinite waste of energy. The failures of physical nature consist of this constant waste of energy, and are always the same. The laws of physical nature are invariable, the laws of organic nature are variable, while the laws of society are more variable. Judged from the point of view of economy in the expenditure of energy, there is a gradual increase in perfection, beginning with physical nature, extending to organic nature, and ending in social nature. This is contrary to the general belief. The average person thinks nature is perfect because its laws are invariable; whereas that is the cause of its imperfections. They think society is imperfect because its laws are variable; whereas that is the cause of its possible ultimate perfection in the expenditure of energy.

The perfection of physical, organic and social nature depends upon the number of lines of expending energy, resulting in the greater adjustment to the environment. There can be no failure where there is but one way to expend an energy, as in physical nature, and there can be no economy. Opportunity for failure increases as the lines for expending energy increase; hence the imperfection of expenditure of energy in the organic and social worlds, in contrast to constant perfection of organism, something that is accomplished only by millions of years of adjustment in the wasteful expenditure of energy in physical nature. What has been considered the imperfections of the organic and the social worlds, their ability to expend energy along different lines, to change, to fail, is the cause of the perfection of the organic over the physical, and the social over the organic.

Physical nature is imperfect because it has no opportunity of failure or success, but one invariable wasteful way of expending energy. The organic has a less number of opportunities for failure, hence is deemed more perfect than society, and society having the maximum number of ways of failure is deemed the least perfect. It is an organism's opportunity of failure that ultimately ends in its success in the expenditure of its energy in perfect economy. Perfection of organism consists of perfection in expending energy, beginning in the sheer waste of inorganic nature, extending to the relative waste of the individual, and ending in the possible perfect economy of society.

Order in the physical world is perfectly stable, progress incalculably slow, yet absolutely sure; order in the organic world is less stable, progress more rapid, but less certain; in the social world progress is very rapid, but order is precarious and the life of the organism is insecure. Physical nature invariably reacts to an external stimulus; for there is but one method of reaction. But the organic and the social worlds do not have anything like this invariability in reaction to external energies; because they are constantly developing new methods of reaction, expending their energies with greater and greater economy, which will ultimately end in the perfect expenditure of all energy in society, securing a perfect social organism, a moving equilibrium which will adjust internal energies to external energies so that there will be perfect order and perfect progress.

Physical inorganic nature, organic life and society are three worlds, three diverse organisms. Physical nature attained the acme of physical development in chemical compounds; then began the evolution of organic life, reaching its acme in man, followed by the social world, and destined to reach its acme in a social organism which will comprise the entire human race. Yet nature is one. There are no breaks, only evolution of the organic out of the physical,

and the social out of the organic. All energy expends itself really by but one law; that is, along the line of the least resistance. In physical inorganic nature the line is determined by the blind conflict of the contending energies, in organic nature it is determined by the intellect, in society it is determined by morality. All energy in nature expends itself along the line of the least resistance. Nature is one.

The animal organism does not by any means react to external nature uniformly, nor have absolute order in its organization, but certainly its laws, ways of expending energy, are more self-executing than those of the social organism. The laws of the individual are still forming; that is, the individual is still inventing ways of expending his internal energies, is becoming better and better adjusted to the environment, so that his energies in their reactions expend themselves with greater and greater economy. But order in the organic world is a moving equilibrium instead of a stationary compound, as in physical nature. The cycle of organic life is an evolution that resists disorganization by a constant adjustment to the environment instead of being unaffected by external attack, as are inorganic compounds. Organic life secured order by the adjustment of internal energies to external energies, not by resisting them, as do chemical compounds.

A failure of adjustment in organic nature is always punished, the adjusting organism meeting with incompleteness of life, if not death. When the sense of sensibility was first developed, no doubt many were the compounds that only partially reacted according to it which still existed, and the environment was seemingly not only incompetent to vary it or develop it, but to destroy it. However, in the course of time, all such organisms became extinct, for we see none of them upon the earth to-day. The same is true in regard to the development of the laws of the intellect to-day. Many is the mind that fails to think, that fails to react to external

stimulus, that fails to follow the laws of expending mental energy, which still exists; but gradually those individuals who react most readily to the environment, who follow the laws of thought, are exterminating and supplanting the individuals who totally or partially disregard them, and who are insensible to the environment. Those individuals who follow the laws of thought are the favored ones in the great struggle for existence and in the diplomacy for the perpetuation of the species which Darwin calls sexual selection.

In the social organism the possibilities of adjustment to the environment are at their maximum, and the resulting order secures by intelligent adjustment the maximum permanency of form. Society will be able to exist always by constantly changing, evolving, as the environment changes, going to the opposite of unchanging chemical compounds and improving upon the variability of organic compounds in reaching permanency of form by yielding to every influence of the environment and adjusting itself to it. Those tribes and nations who live according to the moral and social senses, and thus secure perfect adaptation to the environment, are gradually supplanting those that do not in the struggle for existence. The struggle for existence in the social world is between tribe and tribe, nation and nation, and not between individual and individual. A high form of moral and social sense, a religion based on morality, is always preferred in the struggle for existence among tribe and tribe and nation and nation. That nation having the superior moral and social sense, the superior instinct of religion, is the one which effects the best social organization, which adjusts society to the environment, and which enables it to act as a unit, and has always survived in the struggle for existence between tribe and tribe, nation and nation.

If the individual is hurt by his advanced religion, it is always to the betterment of his tribe, his nation; for the

central function of the instinct of religion is sacrifice, the sacrifice of the individual to humanity. And all individuals owe this to humanity, for all they are or hope to be is due to humanity. It creates for them their values, their ambitions, their entire life. Without humanity there is no life for the individual, hence his religious instinct prompts martyrdom when it is necessary for religious progress. This is the law of religion. The truly religious man does not stop to weigh consequences, but plunges into the flames of persecution as blindly as the instinct-prompted moth flies into the flames of fire. No questions are asked. The stimulus is given in the environment and the act follows; that is all. And the tribe or nation which has had the most martyrs, the most heroes, is the one which has survived in the struggle for existence between tribe and tribe, nation and nation; for it is through religion that the social organism is organized and performs its functions in nature.

II

The social organism is constructed out of individuals and possesses laws independent of the individuals, as the individual is an organism constructed out of physical inorganic nature and possesses laws independent of inorganic nature. Both organisms are subject to the laws of inorganic nature, but the laws peculiar to each have nothing whatever to do with inorganic nature. If the laws peculiar to the individual and the laws peculiar to society are not enforced by the individual and society, they will not be and cannot be enforced by inorganic nature. If the energies of the individual and the energies of society do not expend themselves in the most economic ways possible, it is the fault of the individual and of society, and not of inorganic nature; for in our universe the source of control and direction comes from the most complex organisms, those farthest removed from primordial matter and energy, and not the least complex organisms, physical nature,

the energies constituting matter itself. As the individual through his intellect can modify his own character so that all the energies of his nature will expend themselves to his own advantage; so can the social organism modify the structure of society through public corporate knowledge so that the energies of society will expend themselves to its own advantage. But physical nature cannot guide and control its own energies, nor the energies of the individual nor the energies of society. The individual can guide and control the energies of nature and his own energies, but cannot guide and control the energies of society. But society can guide and control the energies of nature, the energies of the individual and its own energies as an organism. It is the supreme control in the expenditure of energy here upon earth.

The fundamental contention of individualism is that the individual is the supreme authority in the guidance and control of energy here on earth. Simply because the individual is able to initiate social functions—for example, the origination of property through self-interest—is no reason that he can perform all social functions or carry any of them to perfection. One might as well contend that as physical nature originated life and mind, therefore it should control it. Property is originated by individualism at enormous waste, and is adopted only because wealth creates society and must be produced by the individual before society can exist; then the wealth-produced society becomes the greatest instrument in the production of wealth through coöperation that is possible in the nature of things. The social production of property through coöperation will be infinitely more economic in the sense of saving than individual production, and will inevitably be adopted by the whole race for that reason. Matter and energy being blind do everything backwards, use unintelligent nature to create the intellect, and the unsocial individual to create the social organism. Individualism

makes socialism possible, each is the best in its time and place; but the greatest individual will be the product of the highest social organism, and the highest social organism will be a result of the most perfect individual.

If social laws, the expenditure of human energy according to the moral sense, as well as public corporate knowledge, the social sense, are not enforced by society, are not made to flow into the most economic channels from the point of view of society, they are not enforced at all. A person might as well expect, if he were hungry and concluded not to eat, that physical nature would feed him, whether or no, by making her fruits, grains and vegetables supply his wants by forcing themselves into his mouth, as to expect physical nature, or the God of physical nature, to enforce the laws of the individual, or the laws of society, by inflicting punishment for their infringement, or by bestowing reward for their enforcement. Such a theory of nature, the individual and society is not based upon the facts, and is purely anthropomorphic.

Society in order to enforce its laws originates within the individual the moral and social senses. The moral sense, consisting of conscience and duty, is produced by punishment and reward, and is an ever present monitor standing guard over the conduct of the individual, a God within us, as Shakespeare calls it. To primitive man conscience is the voice of God; and most people to-day believe that conscience is placed within us by God, despite the fact that they know it is purely a matter of education and discipline. Conscience is developed in us by the society in which we live, and consequently is slightly different the world over, depending upon a difference in tribes and nations. The social sense is originated in us by society in countless ways, the chief being education, beginning at the cradle and extending to the grave. Thus to identify a function of society with primordial nature, or to think that nature has anything to

do with the control of society is one of the fundamental errors of our theological social sense. Because conscience and duty are unconsciously produced by society, man jumped to the conclusion that they were produced by God, hence that the God of the universe was interested in him and controlled him and society. There is no Power back of the universe. We see all there is.

The individual is responsible only to society, because he is a part of society, and society is responsible only to the individual because it is the whole of which he is a part, and the sovereignty rests in the parts instead of the whole. Society alone controls society, as the animal organism alone controls its functions in its individual capacity. Physical nature has nothing to do with the control of man or of society. Control comes from society to the individual, and from the individual to physical nature, and not *vice versa*; and every vestige of fact in the environment which gives origin to the hypothesis of a God of nature controlling the individual and society, and thus reversing the real order of things, is due to the effect of society upon the individual, producing his moral and social senses. If nature could control the individual, it would be to his destruction, for the natural expenditure of energy is more blind than the expenditure of energy by the intellect of the individual. All nations that have permitted nature to control them through fear and superstition have become extinct or never developed above the lowest savages. Control of the organic world by the physical is always detrimental and often fatal. It reverses the process of evolution. If the Power back of things is God, why does not energy in physical nature expend itself in any other way than that of dire waste, and take millions of years to complete a cycle which, with intelligence, could be completed in a lifetime? It is all a misunderstanding of what nature, life, mind and society are. There is no God of nature. Nature has nothing to do with the control of man or society; but man

and society are the God of nature, control it and use it, because it cannot control and use itself.

Society can control the individual, and the individual can control nature, but whenever the individual controls society, it is to its detriment, and if persisted in, by making class-rule caste-rule, results in its destruction and extinction. The same havoc occurs which happens when some nation through superstition allows physical nature to direct its energies. The lower cannot direct the higher; the individual cannot control society except to its detriment and final destruction. Nature is an organism which results from the blind adjustment of the elements and energies of the universe; but the individual and society use and direct the blind external energies to effect their adjustment, their development and to perpetuate their existence. Just because man stands outside things and controls them, and society, without man and within him, controls man—and man is thus dependent upon society; for this reason man thinks that some God stands outside nature and controls it. Such a belief is anthropomorphism, and, when rightly seen, contradicts every fact of nature, the individual and society. It is the first suggestion of primitive man's imagination, and will be the last belief of our savage ancestors to be gotten rid of by conscious society.

Thus, there are three ways of expending energy in the universe, the inorganic, the organic and the social; and the way of the organic is an improvement upon the inorganic, and the way of society is an improvement upon the organic, and each has been arrived at later in time. First, the laws of physical nature, being the expenditure of energy along invariable lines regardless of all economy; secondly, the laws of mind, being the expenditure of energy along variable lines with greater and greater economy, which subordinates the energy of nature to the individual's advantage; and thirdly, the laws of society, being the expenditure of energy along still more variable lines, resulting in the greatest pos-

sible economy, which subordinates the energies of nature and the energies of the individual to the advantage of society as a whole. Each of these laws ends in a system of order, but the system of the individual is higher than that of nature, and the system of society is a higher form of order than that of the individual; and the expenditure of energy by the individual ends in the expenditure of energy in a more economical way than that of nature, and society expends energy more economically than the individual until through the perfection of the moral and social senses energy is expended with perfect economy; that is, all energy is turned to one purpose, the betterment of the entire human race.

Our theological social sense reverses the procedure here indicated. It teaches that God, which, when traced to His most popular form, is the imaginary Power back of things, enforces all laws, inflicts all punishment for disobedience, and bestows all rewards for merit, is the executive of the universe. The dire waste of energy in physical nature is overlooked, the mistakes and imperfections of the individual laid to his own door, through the freedom of the will, and the manifest injustice in society, its almost total misgovernment, is accounted for on the ground that God does not judge in this life, but in another after death. This great device of a future judgment has kept the individual for thousands of years from seeing through the theological social sense at a moment's glance. The theological social sense is exactly opposite to the truth. Nature runs nature, and in doing so produces the individual; then the individual runs nature and himself, and in doing so produces society; then society runs itself, the individual and nature. The only control that is God-like is from society, for it is to society that the individual is responsible for all he is and does. If society does not enforce its laws, they are unenforced, and if the individual is unpunished for wrongs to

society and unrewarded for merits, he receives no punishment and no reward.

But what is confusing about social control is that the court of punishment and reward of the social organism is not placed in another life beyond the grave, but within the individual's own self, mind, heart, in the form of conscience and duty, sympathy and self-approval. This is the God-like thing about society and excuses primitive man for originating the allegory of God to explain it, but does not excuse modern scientists for continuing to do so to-day. If society has placed a faculty within the individual which bestows reward and inflicts punishment called conscience and duty, the moral sense, the control none the less comes from society; for this is the only way society can enforce its control, and it acts really like a God, and to the primitive mind conscience has always been considered a God, or the voice of a God, and now for the first time in history this wonderful phenomenon has received an explicit explanation in naturalistic terms. But there is nothing more wonderful in society's control of the individual through the moral and social senses than the individual's control of nature through mind; for they are but different aspects of the same principle of control, only the energies which produce the mind are the physical energies of nature, while the energies which produce the moral and social senses are the psychical energies of society. One is no more God-like than the other; in fact, the God of the universe is quite as often conceived to be Mind as Goodness and Virtue.

III

The manifest lack of justice in the way of punishment of the individual and classes for the violation of social laws by the God of physical nature, conceding the theological sense to be true, causes the adoption of a belief in retribution in another world, in which the abused, the oppressed and the

wronged of this world will receive justice; but a system of jurisprudence that venues all cases to an unknown jurisdiction, is to a logical mind, fundamentally defective. Nothing can be more illogical, and man in his own systems of jurisprudence does not follow it at all, but the opposite practice, that of speedy retribution. The theological social sense is an excuse that man gives for the imperfection of things. If it alone controlled man, and our naturalistic social sense did not piece it out, by developing in each of us an instinctive, naturalistic social sense, society could not exist at all. The race never came nearer to extinction than when it believed implicitly in the theological social sense during the Dark Ages, and never made more progress than since it has ceased to believe in it, since the Reformation. The theological social sense is the chief cause of the imperfection of civilization to-day. While the good persons of earth are trusting implicitly in the God of nature to ameliorate the tragedies of poverty, the struggle for existence and war, the bad trust in themselves to outwit the ministers of justice in this life, the wronged individual and society, and readily join in an appeal of all cases to a higher court in another life, and thus delay judgment till death ends all. The bad people of earth use this theological social sense as the chief instrument of oppression of the good. The oppressors, the exploiters, the Judases to society, use the garb of hypocrisy, respectability, nobility and orthodoxy in which to hide their injustice, their inhumanity, their treachery, their method of anarchistic living.

The tragedy of poverty, the struggle for existence, war, are caused by our imperfect social sense. The vices of lust, hate, avarice, dishonesty, jealousy, are due to our imperfect moral sense. The ills of civilization to-day are purely and solely due to an imperfect social organism, not to some God's plan of salvation, or to some weak God who could not do any better. We are in the midst of a universal process

which started with the least possible organization of matter, the maximum waste of energy (physical nature), and will ultimately reach perfect organization in the social organization and the greatest economy of energy. With the doctrine of evolution believed in by all, it is remarkable that the imperfections of civilization are not seen to be due to the lack of development in society, to be followed by speedy efforts of all of us at social perfection. The social organism is inevitably destined to reach perfect expenditure of energy as soon as we get rid of our false, misleading and thought-stopping theological social sense.

The only hope of the race is in scientific moral and social senses. Then the individual cannot escape the consequences of his misconduct; for the source of his punishment will be not only without himself, but also within himself. Society can no longer trust to its traditional God for salvation. The only possible way to make the God-theory of things effective is to have every one believe it; then it will act as a moral sense, and inflict punishment and bestow reward by threats and promises in another world; but to-day the greatest sinners against humanity, such as kings, nobilities, aristocracies, the oppressors and exploiters of humanity in all forms, do not believe in God, but instead, they use the belief to further their nefarious ends. Society must develop its moral and social senses scientifically by a thorough system of education, by just punishment and by certain reward. Society can no longer trust to God and the church, for instead of enforcing morality they uphold existing evils. Nothing is truer than the socialistic thesis that the function of the state and church to-day is to uphold existing economic conditions. Reforms and revolutions do not come from above, kings, aristocracies, nobles, capitalists, but from below, the people. The growth of society does not come from above, but from below. The only healthful stratum of society is the lower. It is the business of the

ruling classes to maintain their position, hence the conservative portion of humanity is always in power.*

The existing Christianity with its present beliefs is powerless to ameliorate the ills of society, or enforce social laws for the benefit of all, because the greatest offenders against society are already Christians.†

There are two kinds of infidels, the theologic and the moral. The theologic infidels, Voltaire, Ingersoll, Paine, disbelieve in all theology; the moral infidels, kings, oppressors, traitors to the race, men who have no fidelity to the race, men who use Christianity to further their selfish plans, disbelieve in all pure morality. They are wolves in sheep's clothing. They are Pharisees. They are individualists. They pervert religion, use it to take advantage

*"We have, consequently at the present day in most of our advanced societies the remarkable phenomenon of the intellectual and educated classes, at first, invariably condemning and resisting the successive steps in our social development, uttering the most gloomy warnings and forebodings as these steps have been taken—and then tardily justifying them when they have become matters of history. * * * In England during the nineteenth century the educated classes, in almost all of the great political changes that have been effected, have taken the side of the party afterwards admitted to have been in the wrong. * * * This is to be noticed alike of measures which have extended education, which have emancipated trade, which have extended the franchise. The educated classes have even, it must be confessed, opposed measures which have tended to secure religious freedom and to abolish slavery. The motive force behind the long list of progressive measures carried during this period has in scarcely any appreciable measure come from the educated classes; it has come almost exclusively from the middle and lower classes, who have in turn acted, not under the stimulus of intellectual motives, but under the influence of altruistic feelings."—*Social Evolution*, by BENJ. KIDD, pp. 235-6.

†"Between that period during which a nation is governed by its imagination and that in which it submits to its reason, there is a melancholy interval. The constitution of man is such that, for a long time after he has discovered the incorrectness of the ideas prevailing around him, he shrinks from openly emancipating himself from their dominion, and, constrained by the force of circumstances, he becomes a hypocrite, publicly applauding what his private judgment condemns. Where a nation is making this passage, so universal do these practices become that it may be truly said hypocrisy is organized. * * * The great men (Greeks) were only too prone to regard their fellow-citizens as rabble, mere things to be played off against one another, and considered that the objects of life were dominion and lust; that love, self-sacrifice and devotion are fictions; that oaths are only good for deceptions."—*The Intellectual Development of Europe*, by JOHN W. DRAFER, Vol. I, p. 51.

of their brothers by teaching that the imaginary world man inherited from his savage ancestors, the immortal life beyond the grave, is the important life, and that the real life of to-day is but a preparation for this imaginary life yet to come. They teach that it is blasphemy and sacrilege to speak out against this imaginary life; and thus they use this imaginary world to control the real world about us to their own advantage. They use the social organization for their individual benefit. They do this unconsciously quite as often as consciously. To speak aught against God and immortality shocks these moral infidels, but to say that society is the primal source of all of our religious concepts, that to it we owe all of our noble sentiments, that the true life is to render service for service by universal coöperation, meets with cries of sacrilege, blasphemy. It has ever been thus. But just as higher concepts in the past took the place of the lower ones, so will the scientific social sense to-day supplant this theological social sense, no matter how supported by church and state. Man is destined to live a conscious existence, to know and feel just what life is, and the sooner he consents to accept this philosophy, the better it will be for the race. Society is destined to be an organism with as full and as complete control of itself as the animal organism is to-day in its individual functions. It is only a question of time and evolution.

On account of this moral infidelity civilization is one vast scramble for wealth, position, power. To the victor belongs the spoils; all is fair in love, war and business; my country, right or wrong; competition is the life of trade; honesty is the best *policy*; do others or they will do you; let well enough alone, and countless other maxims are believed in and acted upon, and as a result civilization is one vast panic, poverty, in fact or fear, the fate of all, the struggle for existence, conflict, war, insecurity and uncertainty the condition of life the world over. This state of affairs is

upheld by our moral infidels, our theological social-sense hypocrites, by preaching the doctrine of the fall of man, instead of his evolution; total depravity, instead of the intellect taking advantage of nature, and of the individual before the moral and social senses are developed; the atonement, instead of the doctrine of martyrdom and sacrifice of the individual to perfect the social organism, compensated for by religion; salvation by faith, instead of salvation by morality; reward in another world, instead of reward in this one, where will be realized our hopes and aspirations, that should and can be realized in the perfection of the social organism here on earth simply by continuing the process now going on.

The result is that society is not able to control the energies of the individual to the general welfare of the race to-day, that many really good persons are forced to be bad by being compelled to live in a system of doing things controlled by bad persons. As physical nature has nothing to do with the control of society, nor the God of physical nature or any other God, the only social control we have is the unconscious workings of the moral and social senses, and the individualistic control assumed by interested persons, corporations and classes, who use society as a tool for their own private benefit. When the social organism has outgrown the period of individual initiative, as it has to-day, individual, corporate or class control acts upon the social organism as a disease upon the animal organism; and as the disease in one case, if not remedied, causes degeneration, decay and death, so will it in the other.

The God of nature is not the God of society. There is no God that interferes with society. It runs its course for weal or woe unhindered, unhelped. To think that nature is not spontaneous and self-sufficing in every kind of organism shows that we do not understand nature any better than the inexperienced savage. The God of nature is nature itself. The

God of society is society itself. It is to society that the individual owes his moral and social senses; it is to society that the individual is responsible; and let it be ever so repulsive to our fanatical God-worshippers, yet society is the only object in all nature that can excite in the individual the desire of sacrifice, the love of lofty, noble work—the real emotion of religion. While true Christianity pretends to work for the glory of God, it really works for the uplifting of man. But think of the gain if this work could only be made conscious!

There is nothing that cheats the race of the services of its noblest individuals so much as the worship of gods. Suppose there was an omnipotent, omniscient, omnipresent God, could He be so pusillanimous, so impotent as to want human beings to worship Him? What good could it do? But service to the race is of incalculable benefit. The only possible good that has ever resulted from worship of God is that by it the primitive tribe was bound together, and all of our forms of worship are but relics of primitive savagery. If the God-idea is interpreted as an allegory, then the truth back of it is man's service and responsibility to the race, and religious worship should be supplanted by noble work for the uplifting of the race. Instead of being guided by faith, the individual should be guided by institutions based on public corporate knowledge. We have yet to see what will be the effect upon the social organism when it finds out how it has been deceived. The change, however, will be effected so gradually by growth, agitation, education, that the race will awake to consciousness as man has awakened without noting the transition specifically. As the individual has outgrown kings, finding that he can best govern himself; so will society outgrow gods, finding that it can best govern itself.

With the truly moral people of the race wasting their energies in futile worship of an imaginary God, no wonder the laws of society go unexecuted. The processes of pro-

duction, distribution and consumption are dominated by men who care nothing for God, because they do not believe there is one; who care nothing for society, because their moral sense has not been developed by society. They are strong individuals, imbued with the praiseworthy instinct of accumulating property, and are sustained by a primitive form of religion which rewards one for every useful occupation. What such men need is to have created in them moral and social senses which will not permit them to experience religious emotion short of the highest and most complete social utility. Not only make them produce as they do, but make them distribute to all, so that all can consume; make them perform social functions consciously, instead of unconsciously, as to-day. And such men are ready for the education, for nine out of ten of them have rejected our theological social sense and are living as isolated individuals, performing social functions instinctively and not in accord with scientific moral and social senses. It is society's duty to create within them moral and social senses which will show them that the life they now live is but a part of life, the individual, and that the great life of society is beyond their conception, and holds within it joys unknown to the individual, except in service to the race consciously performed under a scientific social sense. Then the laws of society will be executed the same as the laws of the individual and the laws of nature, and society will be a conscious organism, as the individual to-day is a conscious organism.

It is true that classes, when performing some natural function which originates some social function, for example, government, are not to blame for persisting in it, for the race through them is performing its social function. But there comes a time when the classes learn, through the moral and social senses, that they are usurping a social function, then their persistent usurpation is the greatest crime known to humanity. Individualism in all of its phases has

reached this stage to-day, and the knowledge of this fact from now on makes the individual culpable.

IV

If the laws of thought are not observed by the majority of minds, the laws of the social organism, the most economic ways energies, feelings and emotions can expend themselves in society, are in a still more imperfect condition to-day, for with society to observe the law is the exception. Many of the greatest thinkers of the race deny the right of society to control the individual both positively and negatively. They accept the apparent inharmony of the individual and society to-day as permanent, believe that energy will never be expended in society except by individual control, and will never reach perfect economy; that the present condition in society is due to its intrinsic nature, and disbelieve in the organic interdependence of all the individuals constituting society. Society to them is not an organism. It is an aggregation of individuals, with no laws of its own independent of its individuals, being controlled exclusively by the laws of its units; a most unscientific and unnatural theory. The individualist can marshal a creditable array of facts to prove his theory, because the incipient organization of society to-day goes far to substantiate such a view; but to a truly philosophical mind, one which can grasp a concept of nature and can see the destiny of things in their tendency, the final supremacy of the social organism over the individual organism, is one of the most palpable of truths. The laws of the animal organism are approaching perfection, being the most economic ways of expending the internal energies of the organism, from the point of view of the individual, that the individual can use in the performance of his animal functions. As the animal organism, through the development of the senses and the intellect, attains the greatest economy in the expenditure of its energies, so will

the social organism in the future secure perfect economy in the expenditure of its energies, feelings and emotions, through the moral and social senses.

He who attempts to control some natural energy, such control being incompatible with its nature, invariably suffers for it; there is an explosion, a collision, an accident. He attempts to expend natural energy along lines not of the least resistance, and thus violates a law of nature. He who attempts to expend the energies of his own organism in his reactions to external stimuli so that his energies do not and cannot follow the lines of the least resistance, suffers for it. He violates a law of human nature. The senses and the intellect make a unity of the animal organism, and an organ that uses the organism as a whole to the detriment of the other organs invariably causes pain to the organism as a whole, and, if persisted in, death. And in society whenever its units (individuals) know their social functions; know that society is an organism with mutually dependent and interdependent units; know how to expend the energies of society in the most economical manner, yet refuse to adjust themselves in a coöperative organism, then society degenerates, decays and ends in dissolution. Society must expend its energy along the lines of the greatest economy, or else the organization goes to pieces. No class can rule forever without social degeneration. Capitalism must give way to coöperation and socialization, as feudalism gave way to capitalism, or else this violation of the law of society will end in the dissolution of society, as caste ended the civilizations of ancient times thousands of years ago.

Nature, through the senses and intellect, is so minutely repeated in the individual that he has little trouble in obeying its laws, expending his energies along the lines of the least possible resistance, or of getting out of the way of the energies of nature that are hurtful and of using them that are beneficial. The unity of the animal organism is so

nearly complete that there is little conflict between the organs and the organism in the expenditure of its energies to the betterment of the organism as a whole; the greatest trouble comes from their intemperate expenditure—the expenditure that is in opposition to the moral and social senses. The intellect of man will never be competent to control the individual in the expenditure of his energies in the most economic manner, for the intellect always acts from the point of view of the individual. Perfect economy can be secured only through the moral and social senses, which regulate individual energies in the most economic manner possible from the point of view of society. But in the phenomena of society, the expenditure of energy, feelings and emotions is so imperfectly repeated in the individual that he is almost completely ignorant of the social expenditure of energy. The moral and social senses have not been able to make of the social organism an organism sensitive alike in all of its parts and self-determinative in all of its actions. The structure of the social organism, being imperfect, it is unable to perform its functions, owing to the conflict between its units not working in coöperative harmony. An individual, a corporation, or a class cannot advance itself to the disadvantage of society as a whole without so lowering the general life of society as to be of a final disadvantage to the traitorous individual, corporation or class. Fundamentally the only way to help self is to help all.

Society is a kind of machine. If the individuals constituting it are associated in it in a certain way, their energies will be expended in the most economic manner possible. These methods of expenditure of energy are the laws of society and depend upon the organization of society the same as the energy of the machine depends upon the structure of the machine. Or, take the closer analogy of the animal organism. The way an energy expends itself in an animal organism depends upon the structure of the animal; the

structure depends upon the animal's actions, the actions depend upon the animal's mentality, and its mentality depends upon its experience with external energy. The animal organism can vary its actions through its mentality, and thus can vary its structure, and so can determine its entire life, expending its energies in the most economic manner possible from its own point of view. So society can vary its structure, laws and institutions, through its knowledge, and if there are no logical social laws and institutions to-day it is due to the absence of verifiable knowledge. Individuals constitute the materials of the social organism, and whether or not they constitute a perfect society depends upon the development of their moral and social senses. But as in the development of the individual there comes a time when the registered impressions of external nature, the intellect, in the individual acquire sufficient power to control external energies to the advantage of the individual as well as the energies of his own organism; so there comes a time in the development of the social organism when registered impressions of the expenditure of human energy will develop in the individual moral and social senses so powerful that they can control the individual and society as an organism, and determine its own development by appropriate laws and institutions. As the animal organism spontaneously forms under the influence of external energies light, heat, electricity and so forth, so society spontaneously forms under the influence of human energies. And just as the time comes when the animal reaches self-consciousness, so the time comes when society reaches social-consciousness. Both the individual and society can be traced to efficient causes; both can be explained by natural laws. And whether or not the reformer proselytizes, or the conservative persecutes, it matters not, the natural action, interaction and reaction of the factors of nature, physical, organic and social, will inevitably end in a perfect social organism just as the factors of organic

nature have produced the animal organism as we see it to-day.

All efforts to give a naturalistic synthesis of nature, life, mind and society are arrogantly rejected by the orthodox school of moralists. Just as man invented machines, just as he made discoveries in nature, and what one man did was accepted by all, so has the race, since it began, adopted the improvements of its moral and social inventors, and made what was originated by one man the property of all. And just as the external energies of nature have suggested machines to one mind whereby external energies can be directed to individual advantage, so has the expenditure of human energy suggested to individuals laws and institutions whereby human energy can be expended to social advantage. All that each suggestion has been is a more economic way of expending energy; and as man in one case adopted the suggestion instinctively, so did he in the other, and each has been perfected by the laws of repetition. The origin of morality to control individual energy is no more divine than the origination of a machine to control natural energy; and the one is as necessary to human perfection as the other is to perfect expenditure of natural energies. Thus there is an intellectual as well as a moral qualification for the salvation of the human race.

Mankind acting from individual initiative and under private corporations and classes, has accomplished all that it can do. If the race cannot become consciously social, deliberately and scientifically social, originate and develop moral and social senses more active, more far-seeing, more social, than the theological social sense of to-day, or our individualistic scientific social sense, which stands off and sees fair play in the struggle for existence, not attempting to avoid the struggle by rightly directing all of the contending energies, then the race will suffer another decadence and the plains of America may become as the plains of Asia and Africa; and Australia and

New Zealand or Central Africa may become the seat of a new civilization, and leave the bad of ours as we did with Eastern civilization, and with this fructification of a new environment develop a system of society which will realize the perfect expenditure of energy, the ultimate perfection of man. The twentieth century will decide which of these suppositions will take place.

It stands to reason that nature is one thing—either natural or supernatural. All we have to do is to read nature as we find it. Science, owing to the foolish demands of theology, has been looking for impossible things—missing links, transitional forms, the scaffoldings of nature. All there is is before us. We must see the like under diverse forms, the many in the one, the one nature in all guises. When once we have gotten rid of the thought-stopping theories of our ancestors nature is very simple. The monism in this book, stated fully in theory to-day, will be demonstrated to-morrow in fact. Really, the Greeks and the East Indians had the advantage of us in philosophizing, for they never had to contend with a thought-stopping social sense such as theology is, and we to-day are taking up theories of nature, life, mind and society where they left off two thousand years ago. No wonder the Dark Ages followed! But the great wonder is that the race has ever recovered its monistic, naturalistic way of looking at things. The race, when it adopts monism as its avowed philosophy, will make as much progress intellectually, morally and socially in one century as it made physically in the nineteenth century with its great inventions and discoveries. Then the race will be socialized.

CHAPTER XIX

WHAT SOCIALIZATION OF HUMANITY WILL ACCOMPLISH.

I

When society by public corporate knowledge, the social sense, is realized, places for all will be determined beforehand; there will be no uncertainty, no fear for the future of our children; life will be an abiding society. The social organism will use every person to his best advantage; every person will be placed in that position in society, by natural segregating and differentiating processes, best suited to him; every person will have the greatest opportunity to develop his entire nature and attain the greatest possible happiness compatible with the welfare and happiness of all. The economy introduced into society by public corporate guidance of human energy will be perfect; the improvement made in the life of the individual will be incalculable.

What the individual has done in the guidance of the opposing, neutralizing and wasting energies of nature, combining them, organizing them, conserving them, transmuting them, directing them to one end by making them subserve the individual, and thus indirectly benefit society with energies which, if uncontrolled and unguided, would end in actions to the detriment of the individual, and reduce his life to the lowest plane on which society can exist; this conscious society can do with the energies of the individual. As the individual has invented machines to control heat, light, electricity, mechanical energy, so can conscious society invent institutions to control love, ambition, selfishness, cupidity, antipathy, religion, and all the individual energies.

Social institutions to-day are successful only in proportion as they are a result of verifiable knowledge wisely blended with the inherited institutions of the race; they are too often a result of the inherited concepts of an ignorant and superstitious past uninfluenced by the scientific knowledge of the present; but even with all of their imperfections, human institutions demonstrate beyond a doubt that they can do for the control of the energies of the individual what machines have done for the control of the energies of nature; and when they are a result of verifiable knowledge, uniformly distributed throughout society, upheld by the reasons of science and the sanction of religion, then we will see the same economy in society in the expenditure of individual energies that we now see in the expenditure of the energies of nature when controlled by the individual.

How absurd are most of the prevalent ways of governing society to-day! If society were sufficiently religious so that it could be organized according to agreement, representatives of the nations of humanity could meet and agree to some scientifically thought out system of society, the majority to rule, and how easy it would be to frame a system of society which would expend all human energy in the most economic manner possible! Then protective tariffs and internal revenues would be relegated to the limbo of forgotten expedients of extravagant kings and rulers, who originated them so that vast quantities of revenue could be raised without the people knowing it, and a system of honest taxation could be inaugurated. How easy it would be to do away with our individualistic system of money and introduce a social money based on the multiple standard and the quantitative theory! But with our ignorance, our foolish partisanship, our dishonesty, our unholy conservatism, being under the hypnotism of capital, our struggle for existence, our absurd preparations for war, our lack of real religion, little progress can be made. All we can hope for by such means

is healthful growth. But when the great enthusiasm, religion, based upon morality, gets behind political changes, social reforms and moral progress, then capital flaunting the black flag of panic will deter no one; for religion is an emotion that thrives on hardship, sacrifice, death; it is incapable of fear or intimidation. We may yet accomplish what is now deemed perfectly impossible from lack of incentive, motor power. Religion will yet perfect the race. It alone is capable of counteracting self-interest by the creation of social interest, making life once more as intense as the tribal life of our ancestors, yet perfectly conscious. The retardations of conservatism will be as thin air when conscious society, motivated by religion based upon morality, directs all the energies of society into the most economic channels possible in the nature of things. There will be none of that getting together of the leading men of the world and deciding that things shall be done so and so, and be declared right because done so and so, regardless of truth and error, right and wrong, misery of the many, happiness of the few, as to-day; for with the motor power of true religion in our hearts and the far-seeing view of a scientific social sense in our heads, we will not stop short of the perfect expenditure of energy in all of our actions.

II

What the individual has done for the cereals, fruits and vegetables by taking them from under the energies of nature and placing them under the guidance of ideas in a perfect habitat created by ideas, this can conscious society do for the individual by taking him from under individual feeling and conflicting ideas by developing in him a moral sense as acute to injustice to another as to self, a sympathy that feels from one end of the social organism to the other, an imagination that sees the consequences of every act before it is performed, and by placing him under institutions created

by public corporate knowledge, the social sense, which will expend his energies in the most economic manner possible.

The law of natural selection does not operate in the development of our fruits, cereals and vegetables; they expend their energies according to ideas. The natural energies of cultivated plants are not wasted in opposition and neutralization of the struggle for existence, but are made to follow a definite plan, and thus all of it is saved and not wasted. The law of repetition does not operate as in blind nature, but under the conscious guidance of ideas. Cultivated plants are produced by the social law of the conscious expenditure of energy in opposition to the blind expenditure of nature. This is an example of the expenditure of energy according to the fourth law of motion—action from ideas.

Just as the individual in his care for the cereals, fruits and vegetables eliminates hard adverse circumstances and supplies favorable conditions; just as the cereals, fruits and vegetables are given absolute liberty to realize their greatest possible development by having all impediments removed and having supplied to them all the necessities and opportunities for such development, all of their energies being expended according to ideas along the lines of the least possible resistance, the greatest possible economy; so will the individual, under institutions created by public corporate knowledge, the social sense, and motivated by religion based on morality, be developed. The struggle for existence will not operate, because public corporate knowledge, not individual feeling, a blind moral sense, and the conflicting ideas of a theological social sense, will determine every action. The struggle for existence is nothing but different ways of expending energy contending with one another, and public corporate knowledge will do away with all of this conflict by supplying concepts that are the most economic methods of the expenditure of energy possible. There will be no pov-

erty, because every one will produce what he can, and receive what he needs, service for service. The property of society will be produced, distributed and consumed according to public corporate knowledge, and not customs, laws and institutions well enough adapted to primitive society, but which, in the advanced society of to-day, allow egotistic individuals to organize private corporations which actually usurp the functions of society as a social organism and render injustice and misery, not only to others, but likewise to their own members; for in taking everything from the laborer but a bare subsistence, they reduce the level of life in the social organism to such an extent that under the most favorable circumstances it is scarcely worth living.

War, the other of the triad of the horrors of civilization, with poverty and the struggle for existence, will be dispensed with because it is based on feeling of the lowest kind—the feeling that the sole function of life is to acquire property, territory, the means of subsistence, totally neglecting the conception of the perfection of the race through knowledge and religion, for its physical perpetuation through property; and being controlled in the dissipation of natural energy on the lowest possible plane, that of expending energy along the line of the least resistance determined by the contending energies, or armies.

War will become a thing of the past whenever nations, through life by the moral and social senses, become so interdependent that it will be as injurious to the nation attacking as the one attacked; then the individual will cease to look upon a mandate of the state as a voice of God licensing him to kill and murder. Ten years of free trade would make the nations of the earth so interdependent that war would be an impossibility; for any nation that would disturb the commercial harmony of the world would be ostracized by the whole socialized world for its offence. It is not only the privileged manufacturing class that upholds the protective

system, but the privileged class which escapes paying legitimate taxes that looks upon free trade with the most selfish horror. It is the tax-dodger who upholds the tariff, not for the purpose of protection to industries, but to make the masses pay the taxes of the classes. Tariff taxation, a species of warfare, is the most unjust system of taxation ever devised, but the persons it wrongs do not know it. It thus passes unrebuked, and awaits abandonment under a more perfect moral and social sense. Then war will be a thing of the past, and free trade will be its principal slayer. Just as capital punishment has given place to punishment by fine and imprisonment, so will nations learn to punish nations without murdering them. England was hurt infinitely more by disturbed economic relations with the Boer republics than by shot and shell.

If the nations of the world would enter into a treaty of peace to boycott the trade of the nations guilty of the tragedy of war, it would be a more successful security for peace than vast armies and ever-increasing navies; for the greed for gain, our property instinct, is much stronger than our misdirected religious instinct to the common soldier which sanctions war. In fact, the chief motive for war to-day is the over-awing fear of nation for nation, the lack of confidence, the want of a religion that can bind the race together in peace and security. A world-treaty of peace could be arranged by the appointment of a world-peace conference. Each nation could contribute so much to its support in paying commissioners and agents, if need be armies and navies, for carrying out its decrees; and the penalty for its violation could be trade-boycott, ostracism and excommunication, arranged in the nature of punishments. After a given date no nation should be allowed to make any further preparations for war, the drafting of soldiers, or the increasing of navies. And all international differences could be settled by this peace conference, comprising the representatives of the entire world.

If such a plan were entered into on a scale sufficiently large, employing thousands of agents in all lands, and being sanctioned by scientific moral and social senses and upheld by religion based upon morality, it would be successful; and even if it were to cost a billion dollars a year, it would be the greatest saving of energy known to the race, and its accomplishment the greatest achievement of humanity. This peace conference would be a nucleus for the unity of the race, from an economic point of view, to be fully effected by a scientific moral and social sense and a religion based upon morality as the race became more and more socialized.

III

But war will never cease so long as man is as ignorant and superstitious as he is. The great change needed in the world is a moral sense based upon knowledge, and a religion based upon morality; then society will become a conscious organism. Whenever our system of education sees that its function is to adapt man to his immediate environment, natural and social, instead of teaching him some inherited curricula consisting chiefly of useless dead languages and dry unconnected facts, which adapted gentlemen and ecclesiastics to life hundreds of years ago, then will this desideratum be reached.

Of necessity the materials of education must change as the race develops. It stands to reason that a system of study originated when our theological social sense held sway cannot adapt us to an environment when a scientific social sense holds sway. Latin was originally studied because of the Vulgate version of the Bible; Greek on account of the Septuagint version. Our modern university was originally a divinity school, then evolved into a school for gentlemen, and retains practically its original course of study even in this day of science. Common sense ought to teach one that as education is an artificial adjustment of one to nature and

society, and that if nature has been subdued by invention and society has been changed by evolution, the materials of education should also be changed; yet while we have become the masters of nature, turning all of its energies to our advantage, and our social environment has made almost a complete evolution, taking the sovereignty from one, the king, and giving it to the many, the people, recognizing no privileged classes, giving the common man a life of security undreamed of by the nations of the past; still our system of education is one inherited from the past and not in accord with the nature we have subdued and the civilization we have developed.

But with all its faults, the hope of the race lies in the school. It is through the school that each generation is to have developed its moral and social senses. The school bids fair to be the sacred institution of the race, to supplant the church and supplement the home. It is certainly the greatest institution of modern civilization; and the instinct with which it is upheld, believed in, defended, shows its importance to the future of humanity.

The primal mistake in modern education is man's favorite error, that of mistaking the means for the end, the symbol for the thing symbolized. The great instrument of all knowledge is language; but language itself is no more knowledge, mental food, than money is physical food; yet it is with language that we obtain mental food, knowledge, as it is with money we obtain physical food. Language is a tool of knowledge; money is a tool of trade. Both are representatives. It would be bad enough to make higher education consist chiefly in learning one's own language, but to make it consist in learning foreign and dead languages shows us that indeed higher education is largely an ornament, a luxury, as Spencer said it was thirty years ago, and is affected by the wealthy classes that do not have to adapt themselves to nature and society to-day, having had left

them the accumulated wealth of ancestors to live upon. The education that makes fortunes, that understands nature and society, that writes great literature, that sees deep into the heart of things, is obtained from experience in living, from a profound investigation of nature, life, mind and society, not from four years of athletics and the study of dead and foreign languages.

There is no subject taught that is more absurdly taught than one's own language, but the absurdity of teaching every other language except one's own is the one that confronts us to-day in our modern higher education. While the principle of the division of labor holds good in every other department of life, yet in acquiring knowledge by reading it is contended that every one must do his own translating. It would be just as absurd for every individual to do his own producing in every other line, as for him to learn all the languages of the earth in order to understand the knowledge they contain. Not more than one student in a hundred ever learns a foreign or dead language so he can use it; while every attempt at the study of the sciences, the fine and the useful arts meets with some success. If words are coins with which we circulate knowledge, then to learn more than one language is to mistake the means for the end, and treasure the symbol, words, for the thing symbolized, knowledge. There can be no scientific system of higher education so long as it is deemed an education to learn dead and foreign languages. All the knowledge of the world should be put into the leading languages of Western civilization by specially trained linguists. It is absolutely impossible for scholars to do this for themselves, let alone others; besides, the study of language incapacitates one for the study of nature, life, mind and society, by not bringing the mind in contact with the elements and energies of nature, and thus enable one to develop the powers of observation and comparison, and to learn the art of experimentation, the science of accumulating knowledge from

experience, instead of blindly obtaining it by absorption, intuition and inspiration. All kinds of absurd, illogical and savage institutions can live on even to-day, because, instead of a system of scientific education, we have a system of useless erudition, the education of a gentleman, inherited from an aristocratic past that no more contemplated the democracy of humanity than it did the unification of the race. Not until our system of education produces in us a sound moral sense and an oriented social sense need we hope to see realized the socialization of the race.

When society is controlled by verifiable public corporate knowledge there will be a federation of nations, a unity of the entire race. Then our materialistic concept of life will be discarded for the true method of living, that of seeing how much of nature can be realized within one's self, how much of society, in the form of exquisite feelings and exhilarating ideas, making life a continuous delight; being free from care, from fear, from want, from uncertainty, the banes of modern civilization; having perfect freedom to expend all of one's energies along the lines of the greatest possible economy; having perfect self-confidence; being filled with lofty ambitions, hope and the highest ideals, and experiencing true religion, the greatest emotion of humanity; having all the assistance that the social organism can give one in realizing the full capacity of one's entire nature. Nations will vie with one another in intellectual and moral achievements. The accumulations of one nation will not diminish by becoming the property of all, as it is now with the crude materialistic life we live. Then will be realized the possibilities of matter and energy here on earth in their long and tortuous evolution from primal mist to the perfect social organism, from the expenditure of energy with the greatest waste to expenditure of energy with perfect economy, the acme of the development of the universal process.

Then the theological social sense will be no more. Its

wonderful allegory will be perfectly manifest to all, and the race will live a perfectly conscious existence. How grand it is at last to know what the great idea God stands for; that it is to society, the race, that we owe everything; that it is in our power to repay our debt of infinite gratitude; that our prayers can be heard and answered; that our hopes can be attained; that our ambitions can be realized, not perhaps as we had ignorantly guessed, in another life, but here on earth; that the great race is to us the correlate on which to lean in times of need, in times of sorrow, and the great cause to uphold, to live for, and to bless, the God to serve as the author and perfecter of our being in all its wonder, beauty and mystery. At last we know that it is the race's influence upon us and our dependence upon it, our overwhelming fear of it, our instinctive love for it, that are the factors that produce the sublime idea, God. At last the poet's exclamation: "Canst thou by searching find out God?" is answered in the affirmative by tracing the effects to their causes; and what exhilarating joy in this answer, in this fundamental knowledge! At last we see that the immortality of the soul is the life of the race; that religion is a reaction from living one's highest, truest, most beautiful nature. This is the peace that passeth understanding, and it is within the reach of every human being in the human race.

IV

What the individual has done for the domestic animals, taking them from under the control of feeling, and placing them under the control of ideas, thus doing away with the struggle for existence among them by introducing expenditure of energy by knowledge; so can conscious corporate society do for the individual, avoiding the struggle for existence among human beings by creating a socialization that will give free scope to the individual to develop his entire nature, both social and individual, by supplying him with

laws and institutions for the expenditure of his energies that will avoid all conflict and secure perfect economy. Society to-day has done much to control the egotistic energies of the individual through civil and criminal law; but what it has done so far has been only to see fair play in the struggle for existence. It has not pointed out the way these struggling energies should be expended so that there will be no waste of energy, hence no struggle, and it has not supplied the motive, religion, to insure execution of even the laws we have. Just as the individual, before the development of the science of mathematics, measured and calculated, so to-day before the development of a perfect social sense, society imperfectly and wastefully controls the expenditure of the individual's energies. But as the individual by the development of the science of mathematics learned to measure and calculate accurately, so will society through a scientific social sense originate institutions that will as accurately and as exactly determine how individual energy shall be expended beforehand as we now calculate the structure of a building before we erect it; and this knowledge will supplant theology, and true religion based upon it will be the motive power of civilization. The problems of the actions of individuals are but complicated problems in mechanics. The fact that our industrial, commercial and business methods permit poverty, when, if the wealth of the world was justly distributed among those who produce it, there would be plenty for all, shows conclusively that poverty is perfectly unnecessary; that it is not due to a vice in nature, but to a vice in society; not due to the nature of energy, but to its imperfect expenditure. All that the individual does for the domestic animals is to insure them the means of subsistence without their struggling for it, and their reproduction guided by ideas; yet what wonderful improvement this makes in the quality of the animal! All that society will have to do to realize a similar improvement in the individual is to use the

products of the race for the benefit of the race as a whole instead of a favored few, and to place the reproduction of the individual and the perfection of the social organism under the control of institutions created by public corporate knowledge.

To-day mankind takes infinitely more pains in the breeding of stock, poultry, dogs and other domestic pets and animals than in the mating and rearing of human beings. Man applies his knowledge to every other thing but himself. To give a naturalistic explanation of love is little less sacrilegious than to give a naturalistic explanation of religion. Nothing shows man still to be an individual more than that his chief source of happiness is the gratification of his animal passions, instead of enjoying the supreme happiness of serving the human race, developing in him the divine ecstasy of religion. Man's animal passions are so abnormally developed by his having made them from anthropoid ape up his chief pleasure and amusement, instead of service to the race, that to-day they are still great deterrents in the making of man a perfect being, a being who will take his chief delight in religious emotion, prompting service and sacrifice to the race.

How much of life is taken up with love, man's strongest individual emotion; how little of life is consumed in service to the race, religion, man's chief social emotion! Yet with all of this occupancy of the individual's attention with love, it is still executed blindly; it is deemed bad taste to talk of the scientific mating and breeding of human beings. Our marriage laws permit any and all classes of delinquents, degenerates, criminals, deformed, diseased, insane and weaklings generally to marry and propagate the species, and make no effort by education to get the better kind of human beings to reproduce themselves. Courtship is blind, controlled by instinct or self-interest. Marriage is chiefly made from motives of wealth and position and not to produce per-

fect human beings. There is no attempt at mating persons intelligently. If there is any subject that the individual should have scientific knowledge about, it is that of reproduction; but imagine what a furor would take place in any of our colleges or universities if they were to offer a course in stirpiculture! This will be one of the studies that will take the place of the study of foreign and dead languages and other conventional trash in the colleges and universities of the future. When education becomes sacred, that is, devotes its time to the conscious development of the moral and social senses, when it has the definite purpose of adapting man to nature and society, then the expenditure of human energy will be the chief theme, and all of the emotions will be treated scientifically and the sexes be mated according to knowledge, not blind love or cunning self-interest; and religion will be expended in the most economic manner possible, will be the motor power of progress, as well as the tie that binds the human race into the social organism.

V

When the object of education shall be the development of the moral and social senses and man once more becomes a religious being, then the perfection of society as an organism, a function of the individual but dimly seen in Christianity, in philanthropy, in love of fame, in honor and glory, will cease to be under the sporadic control of blind feeling, instinct, the moral sense, and will become the chief function of society through the social sense, and will be a function as definitely understood as the function of self-preservation and the reproduction of the species is to-day. Religion to-day is the blind worship of the Unknowable, and consists in performing those actions found to be conducive to human welfare, let them be ceremonies which bind men together or moral acts which do good instinctively, or great beliefs in which all can agree that bind the race together. Every

religious rite or act is explained by the concept of religion which makes it the instinct that binds man to man in the social organism. Such is the religion of to-day. The religion of the future will be intelligent work at uplifting and perfecting the race through public corporate knowledge, not for one day in the week but the entire seven.

Religion is dimly adumbrated through the whole animal kingdom. It is the emotion resulting from living for and working for the species; in the case of man, living for and working for the perfection of society, and thereby securing the perfection of the individual. Religion began far down in the scale of animal development. We see nascent traces of it among gregarious animals in the form of courage and heroism. Amongst human beings there are none so savage that have no form of religious expression; and no matter how crude the rite or ceremony, its function is to bind the clan, the tribe, the nation together, making it form an organism for mutual protection and support.

The three great instincts are self-preservation based upon egoism, perpetuation of the species based upon love, and protection, preservation and perfection of the race based upon religion, heretofore discernible only allegorically and symbolically, for what was done ostensibly for the gods was really done for humanity, and thereby accomplished the protection, the preservation and the perfection of the race unconsciously. All of these great instincts are blind. Man's selfishness, egotism, has created the wealth of the world; man's passion, love, has produced half of our great social institutions; man's religion has saved the race, protected it, and will be the cause of its final perfection. Religion, being a blind instinct, performs the function of organizing the human race when it seems to be only a worship of God; but the other instincts act as blindly. This is true of love; for even enlightened humanity does not recognize the biological functions of love any more than the sociologic functions of religion. Love is

supposed to be some ethereal emotion, as far removed from the propagation of the species as religion is from the service of preserving, protecting and perfecting the race; yet love always ends in the reproduction of offspring and religion in binding humanity together in one organism. There is nothing mysterious about either, except that all instincts are blind, conservative and sacred.

There is some meaning put into the universal practice of sacrifice in all religions, if religion be understood to mean the instinct of the individual to protect, to preserve and to perfect society, and to sacrifice his life, if need be, in following this blind instinct. Religion is the strongest emotion of the human heart, and through its exercise the individual feels the most exhilarating joy possible to human beings. The compensation the martyr feels really makes his sacrifice no sacrifice; for such is the intense joy of his moment of religious ecstasy that a whole lifetime of other pleasures is as nothing when compared to it. But of all emotions religion is the least understood, being surrounded by superstitions and error. Denied by the pseudo-science of to-day as being a phenomenon of healthful, oriented humanity, no wonder its function is misunderstood, perverted and defeated. But in every magazine, scientific book and newspaper we see dawnings of the truth that as the joy of life has for its function self-preservation; as love of the opposite sex has for its function the reproduction of the individual; so the ecstasy of religion has for its function the protection, preservation and perfection of the human race.

Religion to-day is largely generated by the individual seeking his own salvation, and thereby blindly securing social welfare. Yet even in the present form of religion the individual often sacrifices his life for the salvation of his soul, blindly dying a martyr's death, not knowing the function he is performing, that of protecting, developing and perfecting the race, nevertheless grandly performing it, as

will attest religious history through all ages and climes. The individual's salvation depends upon his spreading the gospel to save others, thereby making Christianity a social power indirectly, blindly. How much better it will be to aim at social perfection directly under an oriented social sense that will point the way? Religion is always the same, let it be under whatever creed, under whatever doctrine, and it will inspire just as sublime deeds when based upon knowledge as when based upon the theological social sense, and be followed as an instinct implicitly. The present devotion of scientists to humanity shows this fact, as the future will show it in the service of the common people to the race. Love is just as sweet when its function is consciously understood as when it is believed to be a sickness due to Cupid's darts, or any other of many myths that have been used to explain it, or followed as an instinct that drives one as blindly as the moth into the flame.

So will religion be just as ecstatic when we know its function is to protect, preserve and perfect the race as it is to-day when it is a result of rites and ceremonies performed blindly in the worship of an imaginary God. Religious worship of God is valuable to the race, not for what it consciously does, but for its unconscious association of human beings, organizing them into tribes, nations and races. Directly it does no particular good; it is in its indirect effects that it has been valuable to the race. But there is no necessity that religious service should be a matter of absurd ceremonies; it is due to the ignorance and superstition of man. There is no reason why the indirect benefits of religion, the protecting and perfecting of the race, when consciously done will not produce as sublime a religious emotion as when unconsciously done. Religion can be made conscious, the same as love or any other emotion. There will be a security about religion when it is known to be due to natural causes that will produce transports of joy now un-

known, and not to be compared with the emotions now due to the most scrupulous lives, lived in the service of God; for let a man be ever so religious to-day, it is impossible for him to know he is saved; he only believes it, and amidst his strongest hopes there are doubts. No man can experience the ecstasy of religion in its purest form except the oriented man.

The religion of oriented man does not take away from him a hope, but it gives him a greater one. It does not destroy an aspiration without giving a higher one. It takes away the childish conception of the world, and gives him the universal point of view. The religion here offered is the religion all others have striven to realize. It is the utmost development of the religion of the human race, and when universal will result in heaven here on earth. If false religion can do so much, think what the true religion will do when it is believed in by every one! Then will be the millennium dreamed of by the fathers. It is to religion, the great dynamic, that society will accomplish the application of the fifth and sixth laws of motion to existing civilization. It will be the motive of progress, and will not be frightened or troubled by appeals to self-interest, fear or oppression. The progress of the race, like the evolution of the universal process, is inevitable.

Owing to the fact that for several centuries the intellectual side of man's nature has been in the ascendancy, his religious instincts have been repressed, denied development and satisfaction; but we are now entering upon an era of religious development which will end in the perfection of the social organism. When religion shall be based upon morality and developed consciously by service to the race, guided and directed by the moral and social senses, then society will be an organism with known structure and known functions; will be studied and understood by the individual, and civilization will be a predictable structure, as

the great processes and effects of nature now are, and the socialization of the race will be accomplished. This is the desideratum that prophets have foretold, that inspired poets have sung of, that the entire race has hoped for, and that religion, when controlled by public corporate knowledge, will realize; then nature, the individual and society will be perfectly coördinated, and all energy will be expended to one purpose and one end, the perfection of the individual through the perfection of the social organism, and the perfection of the social organism through the perfection of the individual.

When society is perfectly oriented, controlled by the moral and social senses, religion will cease to be an instinct, and will be developed consciously as we now develop any other emotion by doing those acts which are a stimulus to it. Just as we look at a beautiful picture to produce in us the emotion of fine art, or witness a drama to have aroused in us any of the many emotions it is the function of the theater to produce, or listen to music to have our poetic natures aroused, or hasten to scenes of action or accident that we may become excited in any way, or visit great natural objects to have created in us the emotion of sublimity, or associate with one of the opposite sex to arouse the emotion of love; so in time the emotion of religion will be consciously produced by doing those acts, sacrifices, performing those services, loving-kindnesses, which will invariably arouse it. This is why philanthropy to-day is so popular; it produces religion. This is why service to the race in any and all forms is becoming the occupation of the good persons in all lands, because it produces religion. Religion is the animus of the reformer, the genius, the martyr, let him know it or not. It is the dynamic of the social organism.

Whenever we have a social sense that is verifiable knowledge, a moral sense that will be a perfect representation of society from the point of view of feelings and imagination,

sympathy, tender-heartedness and loving-kindness, life will be consciously lived. Then the race will do with the energies of the individual what the individual has been able to do with the energies of nature, direct them to his own advantage. Under the control of society all energy will be expended with perfect economy.

The great dynamic to accomplish social perfection on earth is religion. Pope Leo XIII. rightly said: "Human law cannot reach the seat of the conflict between capital and labor. Governments and legislators are helpless to restore harmony. . . . The world must be re-Christianized. The moral condition of the workingman and his employer must be improved. Each must look at the other through Christian eyes. That is the only way. How vain are the efforts of nations who seek to bring contentment to man and master by legislation, forgetting that the Christian religion alone can draw men together in love and peace."

This is true of religion, but not true of Christianity. The only way Catholicism can once more become the religion of Western civilization is to substitute the scientific social sense for the theological social sense. For the race no more goes back to its childhood in belief than does man, and the dream of Pope Leo XIII. can come true only in that way. Never in the history of the race has a people taken up and revived an effete religion, but they metamorphose all of them; and this is the hope of Catholicism, and not a return to primitive beliefs. All of the exploiters, oppressors and tyrants of the race to-day are ostensibly Christians. Christianity as a solution of the ills of the race has been tried and the good Pope has described the results. The real solution is the religion of morality, the religion of knowledge, which will point the way and be the dynamic to accomplish the evolution, the perfection of the human race.

Religion is the only emotion that cannot be ridiculed, that cannot be frightened, that cannot be intimidated, that can-

not be bluffed or bullied, that cannot be bribed, that will not compromise, that will not temporize and be satisfied with less than its demand. Religion can meet the capitalistic cry of panic, the whip of the partisan politician, the advice of cowardly friends, the persecution of state and church, the neglect of the world. It is the only invincible emotion the race possesses, the only emotion that can conquer death! Religion is what the enlightenment of the world has halted for, the only dynamic that can perfect humanity and attain the ultimate sociocracy of the race. It is through religion that conscious society will accomplish the perfect expenditure of energy here on earth and realize the socialization of humanity; and it is by the socialization of the race that the individual will attain perfection.

CHAPTER XX

FORESTALLING CRITICISM.

I

It may be objected that the teachings of science cannot develop as high a quality of character as the now unverifiable teachings of the theological social sense; that the moral sense cannot be consciously developed, or cannot be developed without a belief in God and the immortality of the soul; that knowledge as a social sense is not so potent as a belief in theology; that religion cannot be based upon a rational concept of things. This opinion is due to ignorance of human nature as recorded in the history of the human race, and as is seen in existing humanity to-day. We are blinded by too close a view of the race.

Mr. William H. Leckey says: "The whole stoical system of philosophy, which carried self-sacrifice to a point that has scarcely been equaled, was evolved without any assistance from the doctrine of a future life."*

Buddhism, the religion of half the race to-day, which contests the honor in sublimity of conduct with Christianity in its palmiest days, has neither a belief in the immortality of the soul, nor a belief in a supernatural God.

Science as a social sense has just begun to extend itself throughout society; yet it has penetrated much deeper than the surface phenomena indicate. No lives in all history have been nobler, purer and more useful than Tyndall's, Darwin's, Huxley's, Haeckel's, than the lives of Comte, Marx and Schopenhauer, and countless others of their fol-

**History of European Morals*, Vol. I., p. 184.

lowers. All that science needs to become a social sense is uniform distribution throughout society. It will invent institutions to control individual energies as inevitably as it has invented machines to control natural energies, as it has devised ways of developing the cereals, fruits and vegetables; as it has discovered ways of perfecting the domestic animals. As science has done so much for the individual, is it not reasonable to believe that it can and will do as much for society?

The evils of society to-day are a result of the low condition of development of the moral and social senses of the race, its morality, its sociality, its science, its religion. Laws, institutions and methods of living are a product of knowledge. The savage's life is due to what he knows. Greece and Rome surpassed all competitors on account of knowledge, and fell through ignorance. The nineteenth century will live in history on account of its intellectual achievements, not its mechanical inventions or inventions in institutions, great and glorious as they are, but on account of Schopenhauer, Comte, Marx, Darwin, not Morse, Krupp, Edison. Great as were the services of Jefferson and Lincoln they were not so great as the services of the thinkers of the eighteenth century, Rousseau, Voltaire and Paine, who originated the ideas they applied. And great as is the scientist who discovers and describes facts, yet the truly great man is the thinker, the philosopher who interprets all the facts of nature, life, mind and society so that every person can have a concept of them in the terms of his own life which he can comprehend and understand, realizing within himself through the law of repetition all of nature and all of society, thus becoming the acme of creation, the perfect individual.

The capitalistic form of society to-day is a direct outgrowth of the individualistic *laissez faire* philosophy of the eighteenth century, as the socialization of humanity in the twentieth century will be due to the scientific knowledge of

the nineteenth century. The *laissez faire* philosophy, when carried to its logical conclusions, is a complete denial of the right of society to regulate the energies of the individual from the point of view of morality, and ends in the defeat of the solidarity of humanity, the prevention of sociocracy, making the socialization of the race impossible, the destruction of the social organism. If this philosophy is true, society has no more right to control individual energy in one line than in another; no more right to make criminal laws and civil laws than moral laws. The criminal is a *laissez fairest*, and has just as much right to knock a man down and take his property (for under *laissez faire* might is right) as the capitalist has to take advantage of customs, laws and institutions framed during the simple life of primitive peoples, or now lobbied through corrupt legislatures, whereby he lets his victim live on condition that he gives him all he can produce above a bare subsistence; only the theft is condemned by the moral sense, whereas the exploitation is condemned by the social sense. Morality looks at the act, not the means of accomplishment, and no matter the method, force, fraud or cunning, the guilt is just the same. The trouble with the world to-day is, we are devoid of morality and religion. We try to run things by civil and criminal law. The government of the world must be trusted to morality and sustained by religion. Religion back of anything makes it succeed, without it nothing succeeds; hence the gilded failure of capitalistic society to-day. Success means happiness, misery means failure; and that form of society only is successful which secures the greatest happiness to the greatest number. All others are failures.

The capitalistic form of society to-day is justified because the race is so ignorant that it does not know how to utilize its own energies, and it is more economical for the race that a few use the energy of all in producing and conserving the wealth of humanity for themselves than that it be dissipated

in waste; property being the most important thing to human existence and development. But the time will come when capitalism will not be justified, for the race as a whole will be intelligent and moral enough to use all of its energies for itself as a whole; then capitalistic usurpation will be a crime. Just as kingly usurpation of government was once justifiable, but now is treason, and not tolerated in countries which establish their government by reason and the consent of the governed, so the time will come when capitalism will not be tolerated, it being deemed barbarous that individuals or classes be allowed to appropriate to their own use all the property created by society. It may be a long time before such ideas become current, but when religion gets behind their promotion there will be the greatest progress ever witnessed on earth.

While many may think this a hard indictment of capitalism, yet the time will come when to take any advantage whatever of another will be deemed a crime; life will be a mutual rendering of services, a mutual exchange of utilities, mutual coöperation. The truth is, society is an organism, the individuals are its units; and it is not only the right of society to control all individuals, but its duty to do so. And the reason society does not control individuals in the expenditure of all their energies to-day is because it has not a moral sense sufficiently developed to demand it, and because it does not know how. It is deficient in social sense. Louis the XIV. said: "I am the State." He was right; everything above a bare subsistence produced in France was produced for him. To-day the capitalists can say: "We are the race!" They are right; everything above a bare subsistence is produced for them. This is preposterous! It is just as impossible to divide anything produced in society, by society (for society produces everything, gives everything its value, even makes a few pounds of gold worth all the rest of the property in the world, something intrinsically absurd),

among individuals evenly, justly, and yet beneficently (for either the capitalist or the laborer, or for society as a whole) as it is to divide unjustly, unevenly, the blood resulting from the food one eats among the various tissues of the body and yet produce healthful tissues or healthful body. The one production as well as the other must of necessity be produced for all and be used by all; each should take according to his needs and produce according to his functions. For property is to the social organism what blood is to the animal organism, and one should meet with as just a distribution according to service and need as the other.

But if an average business man is presented with this philosophy he will say: "If you deny the supremacy of the law of self-interest, you will destroy private enterprise. No person will work when all get the benefit of his labor." Among ignorant and unenlightened people this is true; but to-day it is not so. We know better. Individualism is the best philosophy when we are too ignorant and too immoral to coöperate; for it is better that the individual, through private enterprise, should save the wealth of the race than that it be wasted in the blind expenditure of energy, as in physical nature. But when we have reached that degree of intelligence and morality whereat we can coöperate, then individualism should be abandoned; and it is being abandoned today for conscious coöperation, only our selfishness will not let us see it. The facts are, we produce for all now as much as we ever will; but our coöperation is blind, instinctive, instead of conscious and voluntary, besides, owing to our imperfect society, each individual tries to control what he produces independent of the rest, and as a result we waste nearly all we produce in opposition and competition. Life is one interminable struggle for physical existence.

Blind conservatism, self-interest, private enterprise, individualism has done much for the human race. To self-interest can be traced the origination of property, marriage

to perpetuate it, and the invention and perfection of our wonderful system of money; but it was powerful simply because society was pursuing social development through individualism, and now that we have reached a degree of morality, a degree of intelligence sufficient to adopt social methods directly, methods as much superior to individualism as individualism is superior to the expenditure of energy by the third law of motion in physical nature, are we still to follow the eternal conflict in the expenditure of our energies under individualism when we have at hand the perfect economy of morality and sociality? Nature has always effected these transitions; as, for example, the expenditure of energy in nature without any economy to the expenditure of energy according to the intellect with economy controlled by the self-interest of the individual; and it will effect the change from individualism to that of the socialization of the race in spite of all opposition, simply because it is the nature of energy to take the line of the least resistance, and the expenditure of energy by morality and intelligence sustained by religion is infinitely more economical than the expenditure of energy by the blind struggle for existence and sustained by selfishness.

The social organism will not rob the animal organism of any of its pleasures, but give it additional ones. What difference does it make to the individual how he comes by a great life—all the thought there is, all the feeling there is—so he experiences it? The conflict touched upon here is one of the deepest in civilization; it is the conflict of the registered energies of nature in preserving the organism in opposition to the registered energies of society in perfecting society; or, differently put, the instinct of self-preservation through the intellect in opposition to the instinct of religion in the perfection of society through the social sense. This is the truth in the dogma in saving one's soul by losing it; for the individual's giving up, surrendering to society, is the

act of religious conversion which ends in regeneration of the whole of society.

The individual's conduct in relation to society to-day is similar to that of a spoiled child which persists in its own wilfulness regardless of the numerous hardships it is made to suffer by it. Man seems rather to prefer freedom and misery than social control and happiness. The individual, owing to lack of religion, seems willing to suffer any hardship so he is not compelled to trust to society for any control regulating his means of subsistence. The individual indeed dies hard, and society is long-suffering; but if the individual does not pass under the yoke of society, take up his cross in the Christian sense of that word and bear it, he will never reach the acme of individuality; for it is by social control that all the energies of the individual can be conserved and utilized, and by social control alone.

To demand institutions instantane whereby to regulate society is like demanding a machine before the energy it is to control is known. If knowledge were uniformly distributed throughout society, it would soon realize itself in institutions which would control and direct the energies of the individual as the individual controls and directs the energies of nature. When the race knows what is wrong with it, when it sees that it can never reach perfection or happiness under our theological social sense, it will soon set itself aright. But to ask the end (institutions) before the means (knowledge) is like asking for bricks and furnishing no straw. The point of view is the main thing, and that is what we are contending for. The institutions of the future society will be developed by art before being produced by science. New institutions are developing every day had we the acumen to see them. Just as the French rulers, before the French Revolution in the eighteenth century, were absolutely incapable of seeing the growth of democracy, which culminated in the Revolution, so are we

to-day unable to see the nascent institutions that will result in the democratization and socialization of the race in the coming future. The institution of all others to-day that is a product of the scientific social sense is the school, beginning with the kindergarten, passing to the common school, and ending in state and national universities. But the public press is no less the product of the scientific social sense, to say nothing of the other social institutions too incipient for us to do more than mention, such as the theater, fine art and music, that will be powers when fully developed. The socialization of the race has begun. We are writing about something that is in existence when we speak of the social organism.

The functions of state are widening. As the functions of the church become inoperative, the state assumes them. Most of the education of to-day is performed by the state. Witness the great educational reform going on in France to-day. It is one of the greatest examples of moral courage ever displayed by any nation, and one which will be followed by the whole world. Education would be the legitimate function of the church if it were based on knowledge instead of dogmas, or if its allegory were universally believed in, as it was in the Dark Ages. But to-day education has passed forever from its control. Whether the church itself shall pass away and the state once more take on the double function of religion and politics, as with primitive man, depends whether the new truth of science will be permitted to take the place of the old dogmas. If the church continues to fail, as it has failed for the last three centuries, then the school will be the sacred institution of socialized man.

Nature is not choice in its means, and when the church could not develop an oriented moral and social sense, the church and state separated, and the state began performing the function really peculiar to the church alone, that of education. Such is the roundabout way of evolution when

following the blind dissipation of energy as seen in nature, individualism, and unconscious society.

II

The contest for supremacy in Western civilization to-day is between private and public corporations; between the individual and classes on the one hand and the social organism on the other; and in this conflict Western civilization may go to pieces, as the social organisms of history have disappeared in the past; if so, another Dark Ages may follow. Progress in the human race has been in waves of hundreds of years from crest to crest; but the trough of each wave is higher than the preceding one. The stream of humanity flows up, not down. If the race does not succeed in having society by public corporate knowledge this time, it may the next time it develops a grand civilization, which will follow the retrogression that may set in if society by corporate knowledge be not adopted in the present conflict as to how society shall be governed. When we remember that the present stability depends solely upon the people not knowing the injury that is done them, then that justice be done them is imperative, or else the conflict may break out in disastrous revolution.

The social organism, in organization now, is like a protozoan. Whenever the energies of the organism as a whole cannot be controlled by the organism, there is a disruption and new organisms are formed, and a trial at producing a general organism that can control the internal energies to adjust it to external energies is begun again. This is the social organism's reproduction. Or society may throw off organisms as colonies, migrations of humanity seen in all ages of humanity, each new organism being an attempt at improvement upon the old. The resulting societies, no matter how reproduced, end either in a higher and stronger organization or in extinction. History is replete with such

social phenomena as this; one of the most recent cases being the secession of the United States from Great Britain. The result of our late Civil War gives us hope to believe that the general government of the United States is sufficiently strong to resist all internal attacks of anti-social energies, and also sufficiently strong to direct the energies of all of its individuals to the betterment of the United States as a whole. The human race to-day is the result of the conflict of individual and class energies with social energies, it having suffered innumerable revolutions during its long life, and Western civilization is now in the midst of the throes of another great conflict which will end either in a social organism that will be able to adjust the race as a whole to its habitat or produce one that will succeed in doing so. Society is a phoenix. Or, in literal language, the social organism is an amorphous body which may exist as a single nation or as several interdependent nations. One social organism may coalesce with another or separate into two or more parts by division, each part becoming a social organism in itself; or a social organism may arise out of the dismembered parts of an extinct social organization, as the nations of southern Europe rose out of the remains of the Roman Empire. It is impossible for disparate social organisms to ally. They exterminate each other, as Occident and Orient, savage and civilized. By social organism coalescing with social organism, by becoming economically dependent upon one another, or by spreading its ideas over all the world as America is doing to-day, in the end the social organism will combine the entire human race in one organism which will be sufficiently strong to direct its internal energies so as to adjust itself to external energies in the environment, and thus realize a moving equilibrium of the entire race and expend all energy in the most economic manner possible. This will be the socialization of humanity.

A general fear that the social organism cannot be run by

verifiable, public corporate knowledge and institutions based upon it is just as groundless as would be the fear that the animal organism could not be run by ideas as well as by instinct. The fear that every person will not be provided for under conscious society is perfectly groundless; because society by public corporate knowledge means the greatest economy, the greatest happiness to the greatest number; whereas society, by feeling, by instinct, by individuals, corporations and classes, as we have it to-day, means the greatest waste, the greatest conflict, the greatest injustice, the greatest unhappiness.

The fear that conscious society will be a form of civilization in which the individual will be bereft of all liberty is exactly opposite to the truth. Social control will guarantee to the individual the complete development of his individual nature, and, in addition, will cause him to derive as much happiness from his social nature as he now realizes from his individual nature. Society will be as responsible to the individual as the individual is to society, and the liberty of all will be the liberty of each, and the right of all will be the right of each. The highest function of society is to perfect the individual, as the highest function of the individual is to perfect society. The coördination and coöperation of society and the individual will be perfect; their relations will be reciprocal in responsibility and in function. The sovereignty heretofore existing in the king will be distributed to the race as a whole; and when the race is controlled by a scientific moral and social sense and religion is based upon morality, then the most intelligent of the race will run the race for the benefit of all and be compensated therefor not by self-aggrandizement, but by the ecstasy of religion. The great motor of all social service will be religion. Religion, the ego of society, alone can counteract selfishness, the ego of the individual.

The scientific social sense will destroy and take the place

of our theological social sense with its belief in an imaginary God and the dream-life of immortality; but instead of destroying religion, the instinct to protect, perpetuate and perfect the race, will put it on its true basis, morality, and make religion the greatest source of happiness the individual is capable of.

A century from now the anomaly of our age, which the historian will note most fully, will be the absence of all true religion. While we all go to church and pay our respects to Christianity, yet when it comes to every-day conduct, we are hypocritical infidels in all we do. Each nation is vying to outdo its neighbor in selfishness, duplicity and immorality, and maintains a navy and an army to fight, if need be, to extinction. A proposal of a universal disarmament is met with alarm by all, for no nation keeps its word with another only so long as it is profitable; yet this universal immorality is practiced by all nations believing in the Fatherhood of God and the brotherhood of man. We believe nothing. We are ignorant. We act blindly as individuals. We live by instinct. The orientation of the race will put an end to all this anarchy. The social sense will teach man how his energies should be expended so that they will all be conserved, one nation supplementing another, rendering service to another, the whole race living in mutual economical dependence. The first nation which adopts the expenditure of energy by public corporate knowledge will surpass all others, let it be monarchic Russia or democratic America; and the other nations of the earth will speedily follow, or else fall behind the van of civilization from lack of coöperation. This is no theory, but a fact. See how the organization of trusts is spreading over all the world. This is expenditure of energy by private corporate knowledge. The expenditure of energy by public corporate knowledge completes the evolution, being another example of nature not being choice in its means, accomplishing by private corporations, indirectly

at first, what it could not do by public corporations directly until to-day.

Instead of agnosticism, atheism, materialism and infidelity being sacrilegious and blasphemous, they are the cause of the recognition of true religion. It is not only absurd to worship an imaginary God, but it is wicked; for by doing so one adopts a false moral and social sense which ends in immorality and waste of human energy. God worship is the last altar of idolatry, and belief in immortal life is akin to belief in witchcraft, spiritualism, possession of devils and ghosts. The function of our senses and intellect is to enable us to live this life; the function of the moral and social senses is to make life worth the living. We have no senses, no intellect, no faculty to enable us to know how to live another life, and it is impossible to develop them in this life. Of necessity each life must suffice for itself. Heaven and hell are not an extension of this life, but totally different places. The laws of natural selection and repetition cannot possibly fit or unfit one for either place from any experience one can have here. If there is another life, nothing but experience in it could ever adjust us to it, not experience here on earth. Immortality was conceived by a mind that knew nothing about the laws of mortality, his conception of the facts of mortality being as wide of the mark as his dream of immortality; both being perfectly imaginary. The same is true of the concept of God. Primitive man saw facts only allegorically, and, considered in this light, immortality is the life of the race, and humanity is the correlate to man, not God.

Religion severed from morality is superstition, racial suicide. What made the Hebrew theology survive in the struggle for existence between theology and theology was that six of the ten commandments are moral; and what made Christianity surpass Paganism in Western civilization was that the Golden Rule, the suppression of selfishness, its fun-

damental doctrine, is purely moral. The Doukhobors to-day are an example of religion severed from morality. Catholicism in the Dark Ages is another. The hypocrisy of to-day is certainly better than religion based on faith instead of works. The old-fashioned infidel is right, if religion cannot be based on morality, and morality on knowledge, then religion should become extinct, and is indeed an aberration of the race that will end in death and destruction. But such is not the case. Just as love wrongly expended is lust; so religion wrongly expended is superstition. Each, when rightly expended, is pure, noble, sublime—love the instinct that perpetuates the individual; religion the instinct that perpetuates, protects and perfects the race.

The fear that the social sense will do away with or destroy the moral sense is just as groundless as would be the fear of a protozoan should it fear that if it developed a sense of sight it would destroy its sense of touch; for the social sense is a sense of sight to the moral sense. The social sense in the coming society, instead of opposing the moral sense, will perfect it by pointing out to it many ways of expending energy that are hurtful which now seem to be beneficial, and *vice versa*. Just as sight shows distant evils to the animal organism, so knowledge shows distant evils to the social organism. To use the social sense to assist the moral sense will under no circumstances weaken it, but always strengthen it; as sight makes touch more effective.

If the moral sense were perfect without the social sense, the social organism could reach no higher perfection than that of an animal devoid of all the senses but touch. The moral sense is blind feeling. An ignorant man, no matter how good he may be, is certain to do some wrong. The founders of the Inquisition, judged by the standards of morality of their age, were good persons, but ignorant and bigoted. Much of the real immorality and unsociability of man is backed by the best motives in the human heart.

Misdirected parental affection has ruined many a child. Religion coupled with ignorance and error ends in fanaticism and bigotry. There is no more surety that a good energy unguided will expend itself aright than that an animal without eyes will find its way. Each may succeed after innumerable trials; but think of the waste of energy! The hope of the future of the race lies in the mutual development of the moral and social senses and the generation of true religion by putting their teachings into practice in every day life. All of this is but another illustration of the fact that it is not the purification of energy that is demanded, but its conscious direction in expenditure. Good and bad are purely relative terms in the expenditure of energy and the same energy that is bad with proper expenditure would have been good, and *vice versa*. Nature, life, mind and society are problems in the expenditure of energy; that is all there is to it. And civilization is civilization because under it man's energies are expended more economically than under barbarism; and socialization will be socialization because under it all human energy will be expended in the most economical manner possible.

III

Religion is an emotion resulting from the performance of certain acts which either directly or indirectly are conducive to collective human welfare. Often the result is purely unconscious. The acts are instinctive. Religion originated in the clan. It grew out of love of kind. Its first observances were made to ward off the evils of the environment to the clan, which was the primitive form of the family. In phallism religion hallowed the reproductive act, so that it lingers yet in the sacredness of marriage. Later, religion worshipped an ancestor and treasured the tribal organization he left. From the clan grew the family in the modern sense of the word. Religion became the instinct that pro-

tected the clan, the family, the tribe, the nation, and ultimately will protect the whole race. Religion has always bound man to man. It is the instinct of social preservation. It is the instinct that binds the species together throughout the entire animal kingdom. It is purely blind, but always works to social benefit. To-day religion means almost anything, and while few of the enlightened, if any, believe in the Christian religion,* yet if any of the great nations were to offer to abolish it, and not put in its place true religion, it would send a shock through civilization that would paralyze humanity. This is why it is that the infidelity of Voltaire, Paine and Ingersoll has had so little effect upon the race. The one question: "If you take away my religion from me, what are you going to give me in its stead?" has dumfounded all the old-fashioned infidels. We may not believe in Christianity, but we do believe in religion; and so long as Christianity stands for religion, one dare not offer to destroy it, or one will be anathematized, not only by the church, but by the mass of enlightened humanity who are not Christians at all. Hence the necessity of substituting real religion for our hypocritical Christianity, which, like the dog in the manger, neither protects, perpetuates or perfects humanity nor lets science do it.

Christianity has so perverted religion that most persons think to be religious means to be unhappy, to deny one's self the pleasures of life, when in fact the ultimate function of religion is to realize in the individual the fullness of life, the perfection of life, the greatest happiness to the greatest number, to make of earth a veritable heaven. The world has changed the content of its concept of religion many times, and has not deteriorated by it; and it will make the

*The bitterness manifested against Spinoza and Hobbes and Tom Paine and other "infidels" was due probably in great part to the fact that no small portion of the declarations of these men was truth and could not be gainsaid. Men usually feel good-natured towards opponents whom they have whipped. But the apologetic of those times could not answer completely the arguments of the "infidels": and consequently what refutation could not compass, invective was expected to accomplish.—*The Higher Criticism*, GEO. W. GILMORE.

change again without hurt, so be not afraid to accept true religion, which will ultimately socialize the race.

If Christianity is not the ultimate form of religion, there is no reason why the oriented should not boldly proclaim it. In going any place, if it is found that the accepted route is longer than a newly discovered one, what person would persist in taking the old way? Who travels by stage now that we have the locomotive? Thus, in every line, when a more economic method of expending energy is found, the old form is discarded. It will be so of religion; but all that is good, true and useful in Christianity will be preserved, as the good in all other religions has been, and the bad will be abandoned in spite of interested followers and the inertia of antiquated practice. Nothing is truer than that, no matter what the intellectual development of the race, religion will always be with man to bless him, to protect him, to perfect him.

No doubt the time was when the sexual act with man was purely blind, instinctive, as it is with animals to-day. Love is so now. Few persons seem to know what the birth of love means; but it always tends to the same ending. The biologic function of love is acknowledged by many. It is upon the point of being taught in our colleges. Stories will be written about it within the next few years. Have not Guy de Maupassant, Hardy and Tolstoi already attempted it?

As love to man was once a blind unintelligible instinct, so is religion to-day. The means of grace, the ceremonies of religion, the beliefs, the superstitions, the theology—all tend to bind man to man and thus blindly to organize society. Worship is the courtship of religion, and performs its function as blindly as the courtship of love with its coquetry, indifference, independence, surrender, trust, happiness. But science studies the blind emotion of religion and devises a system of living institutions to effect consciously the same purpose, producing the same religious emo-

tion, as love, based on biology to-day, is just as sweet as love based on the romance of the mythology of yesterday. Religion can be based on verifiable knowledge the same as it is now based on tradition, for whatever belief binds man to man will produce it; and as nothing can compass the race and unify it for all time but the truth, the truth alone is able to bind the whole race together in one organism, and produce a religion that will be world-wide and race-deep. Religion can be produced by institutions based on knowledge the same as if they had grown up unconsciously; as love is just as sacred when regulated by a marriage system consciously devised by statute law, as when by custom handed down from time immemorial. Many institutions that were originally religious, for example, the theater, are not considered so now at all, and others, the school, for example, are destined to become so. Many pursuits thought not to be religious at all, produce an emotion generically identical with religion, for example, the glory of war, the enthusiasm of politics—each party is saving the country—the ecstasy of fame in science, literature, fine art, and the satisfaction resulting from honest labor of any kind. But it takes no deep thought to see the kinship of these emotions to religion, when it is known to be the instinct to protect, perpetuate and perfect the race. All man's emotions can be consciously generated. Just as we can consciously generate love by associating with one of the opposite sex, so can we generate religion by doing those acts that engender it. To do a kind act, an intelligent act, a useful act, a beautiful act, always produces the emotion of religion, no matter what we call it. Life can be lived consciously by society the same as it can be lived consciously by the individual. Such a life will be fully realized by our posterity in the future.

Religion, to be religion in the highest sense of that great word, must be an emotion that will make the solidarity of the race perfect, and must result from morality based on

verifiable knowledge. Religion based on superstition is a menace to racial progress, racial perpetuity, and is destined to be supplanted by the religion of morality. So the fear of the Catholic church is well founded. Its greatest foe is science. But true religion, based on morality, right living, controlled by science, is destined to live as long as humanity graces the earth with its presence.

It has been argued that knowledge only makes the criminal more criminal. Knowledge may originate institutions which, like any other machine (for an institution is only a psychical machine), sometimes misdirects energy, and the wrong it does is in proportion to the power of the energy it attempts to control; but because the boilers of a locomotive explode and kill many is no reason we should not use physical machinery, nor should the misuse of the school, teaching a lot of rubbish that leads to crime instead of morality, condemn all forms of education. The misuse of knowledge is an accident in the conduction of human energy that argues no more against conscious conduction of human energy than an accident in the conduction of physical energy argues against its conduction. And humanity shows its sanity by not paying any attention to either of these arguments. Mistakes in the expenditure of human energy on account of imperfect knowledge only show that knowledge as a method of directing human energy is yet imperfect; but experience in the expenditure of human energy under the control of knowledge is no more disastrous than the control of the physical energies of nature; and both are destined to become more and more perfect as humanity develops, until the perfect day, when all energy will be expended with the greatest possible economy. The remedy is not less knowledge, but more. What are called crimes, sins, vices are but ignorantly expended human energy, energy guided by the individual's nature in opposition to the moral and social senses, his social nature.

Knowledge, instead of causing crime, is the only possible way to tell what crime is, and thus to suppress it. It is knowledge that the whole world needs to-day; knowledge that will point out the way that all human energy should be expended; then the race will speedily reach perfect adaptation to the environment, and man perfect adaptation to the social organism.

Our penitentiaries should be turned into manual training schools and asylums. Convicts should be taught how to expend their energies so that they can live a civilized life. Their natures should be developed and balanced. If this cannot be done, then a world of their own should be provided for them. They should not be allowed to perpetuate their kind, and the social conditions producing criminality, disease and degeneracy should be done away with by social control. Criminality is usually produced through the abandonment of the individual by the race. It is the duty of the race to develop the moral sense in every one by reward and punishment, to develop the social sense by education and controlment. To love persons into being good is only one side of the moral sense; to punish them justly, judiciously and severely is the other. But no matter how acute the moral sense may be, if the social sense is undeveloped, the life of the individual will be imperfect, and if the individual is incompetent to understand his relation to society and society's relation to him, he should be especially cared for by society, being denied certain rights and liberties, and being relieved of certain duties and obligations—be a ward instead of a citizen.

Poverty, the struggle for existence and war are due to ignorantly expended human energy. As every normal man may be drilled into being a soldier, so can he be drilled into being a citizen and educated into being a brother. Citizens are no more born citizens than are soldiers born soldiers. Each is a product of his respective education. What would an army be without military tactics? A mob. It is con-

trolled by feeling, and just as when the mob controlled by military tactics, becomes an army, and is an organism; so society when controlled by public corporate knowledge will be an organism. The control in society to-day instead of being due to verifiable knowledge is due to pseudo-knowledge inherited from an ignorant and superstitious past, and is almost completely unverifiable; and, on account of this, often highly intellectual individuals treat society with disrespect, disobedience and contempt, using and abusing it with impunity, and, as a result, civilization is but one stage above barbarism instead of the interdependent and coöperative life possible to completely oriented human beings.

IV

The expenditure of human energy inimical to organized human welfare is a crime no matter whether it is an act which adroitly uses the social organization for individual or class purposes or an act of individual cunning, violence or blind feeling. This conception of crime is intellectual, not moral. It is basing crime upon knowledge, not blind feeling. It makes no difference to society how an act is produced, if it tends to destroy social organization, or if it prevents social organization, or if it perverts social organization to other than universal welfare, it is a crime; and, while owing to the imperfections of the moral sense, it is not felt to be a crime to-day, yet if it is seen to be one by the social sense, that constitutes it a crime. Those actions which tend to destroy society are called crimes, not so much because man consciously knows them to be inimical to the race, but because in the long history of the race, that tribe or nation which punished such actions survived and perpetuated itself, and those that did not perished; and it is the dread of this unconscious social disaster that puts in us our instinctive horror against such crimes as theft, adultery, treason, murder. Crime is still an instinct. In the future

there will be many new crimes, not instinctive, but conscious, when the true method of expending human energy will have been discovered.

To-day ingenious individuals and classes accomplish results through private corporations which could not be realized by individuals. To-day there are many private corporations which are conspiracies organized and legalized to get possession adroitly of all the property of the race as soon as it is produced. These social traitors subsidize the press, corrupt the pulpit, and are making attempts at the control of higher education, and thus control public opinion. Any one denouncing them is called the most opprobrious names. He is surrounded with prejudice, so that those he is working for become his enemies. He is fortunate if his real position in the world is not completely perverted and if he go not down to posterity as a traitor instead of a benefactor. If there is the shadow of a tendency on the part of the government to suppress these social traitors they make the direst prediction of social disaster that will result by their destruction, and thus go scot free, and are whitewashed by the press as public benefactors, the cause of prosperity, the backbone of the commonwealth, and so forth.

All social functions should be controlled by society. It cannot be otherwise than disastrous to any people to allow its finances to be controlled by private corporations, or to allow private corporations to control taxation, as in the case of tariff taxation in the United States. It is just as logical to have private individuals own and operate the public highways, streets and sidewalks, as to have them own the street railways and railroads of a nation. But if a nation has not the intelligence and morality to govern itself, society is not choice and accepts individual government.* It is just as

*In the eye of the law railroads are modern public highways, created to serve public uses; and for public purposes enjoy privileges and franchises which partake of the nature of sovereignty. — *American Law*, Vol. II., Sec. 538, John D. Lawson.

much a crime against society to allow speculators to raise and lower the prices of stocks, bonds, farm products, and all other property, and thereby acquire unjust title to the products of the nation, as it is for a highwayman to make a passer-by purchase safety by standing and delivering all he has at the point of the weapon. Wrongs should be called by their right names, then we could see them, feel them and right them. There is no place in which the inadequacy of Christianity is shown more conspicuously than in its cowardly upholding of the horrors of capitalism.

The law of justice in society is that service should be rendered for service. Property acquired otherwise is robbery. When we have a moral sense so acute as to recognize this law, the socialization and the democratization of the race will be assured; and when the social sense points the way suitable institutions will follow, and the perfection of the race will have been accomplished. Let the race accept this theory of things, base religion on morality, and morality on knowledge, then the perfection of humanity will be only a question of time.

Heretofore only isolated individuals, reformers, geniuses, martyrs have taken society to task for its lack of responsibility to the individual; but to-day all thinkers, religious persons, literary people are demanding that society bear the brunt of being *particeps criminis* in the crimes, vices, wrongs and sins of the individual, and of the poverty, struggle for existence and war of society as a whole. No longer can society stand idly by and simply punish the offender. It is society's duty to help him, and it is his right to demand help. No longer can society stand by and demand only fair play in the industrial and commercial worlds; it must insure it. What is government for, if not to govern? The individual should not only be free to act, but he should be furnished with institutions, when he makes a choice, that will not betray him, but will realize for him perfect results.

The physical evils of civilization grow out of the unfair distribution of property. If analyzed, it will be found that only a few of the cormorant corporations that live off the body politic are producers. Every institution to protect the producer of property, to insure to him his rightful use of it, is in line with the socialization of the race. Property has been of such great importance to the perfection of the race that society as a whole has really gained by the growing up in it of a privileged class, the capitalistic, which did not work, but simply saved what the workers produced; but this class to-day has served its function, and should give way to public control and just distribution.

Looked at from the wide point of view of humanity, it was better for the race as a whole to have a medium of exchange, money, which was good the world over, let it be made directly in the interest of individuals, than that society as a whole have many kinds of money but none of it legal tender outside of its own national bounds. But now that such a money is developed, society should take charge of it, control it, perfect it, and the private individuals and corporations who have originated it, should become public servants. The true system of money cannot be perfected by private individuals, because it is inimical to their best interests. The individual has done all he can do; it is now society's duty to perfect money by regulating its quantity, by the amount of work it is to perform, and thereby regulate its value. Money should be the representative of property, and in quantity should be in direct proportion to the amount of property in the world. It should be asset money; but it should be the assets of the whole world, not of some particular bank or systems of banks and financiers, to enable them to make it an elastic yard stick to measure long for them when buying and short for them when selling. Then we will have a money that will increase as property increases, and decrease as property decreases; be perfectly elastic, not

for the benefit of a few, but for the benefit of all. For money as a measure of value must increase as the thing it measures increases, and decrease as it decreases; because it is all the money that measures all the property, not some given unit. The standard of value is the ratio existing between the quantity of property and the quantity of money, and to make it unchangeable, always of the same value, the ratio must be constant by ever increasing and decreasing the amount of money to correspond to the amount of property as it is produced and consumed.

The final condition of society, as seen in the tendency of things, is that of social democracy. The only possibility of the perfection of humanity is the democratization and socialization of the entire race. Nothing is truer than that men are no more nearly equal morally and intellectually than physically; nevertheless, all men should have equal privileges and equal opportunities guaranteed them by the race to be men. That all men are unequal by nature is no reason why society should be organized with the purpose of originating and perpetuating another and more grievous inequality, that of civil, political and economic inequality. The inequalities of nature should be overcome by the race instead of being perpetuated by it. This is another of the improvements that man can make upon nature, and that society can make upon the individual. What irony to teach that all men are not and cannot be equal politically, then place in the sovereign position some incompetent degenerate whose ancestry happened to occupy it by force, fraud or chance! True, men are not equal, but it should be the business of society to see that its really superior members have an opportunity to assert and maintain their superiority; that is, that all men have equal rights and equal opportunities. The economic differences among men to-day are artificial, obtained by birth and maintained by education and social environment. Property not obtained by service

generally does one more harm than good. It will be the business of oriented society to see fair play, to give every child born into society an equal advantage with every other one to develop its nature to its fullest capacity, let it occupy the humblest or most exalted position in society, remembering that nothing so stunts, so degenerates a human being as wealth, rank, position, and the lack of contact with the commonality of mankind.

The history of humanity has demonstrated time and again the impossibility of any class's being able to perpetuate its unequal position in society. In all cases the nation which persists in violating this cardinal law of human association meets with destruction. After ages of culture by the aristocracy, the common man to-day has a better chance of becoming cultured than the offspring of the privileged classes. The best way to bequeath anything to one's offspring is to bequeath it to the race. What the commonality inherits from all humanity benefits it more than what the favored classes inherit from their immediate ancestors. Society knows no aristocracy. To belong to a class of humanity cuts one off from the socializing energies of the race. It is to be placed in a position similar to that of an organ cut off from the animal body by ligatures, or to have all of the blood of the animal body directed to one organ by some congestive disease. Both conditions are unnatural and result in deterioration, degeneracy and death.

Nature sets its head hard against class rule in society, and so far in history it has been the only deterrent to it. The chief condition of social health is social democracy. Every class that has established itself in society has inevitably ended in degeneracy and death. This must be so or else the race as a whole, under the rule of the favored few, would soon misdirect all the energies of society; and society's function as a social organization, that of expending all energy in the most economical manner possible, and thus produce a perfect

individual, would be completely perverted. Human association is an organization in which the function of the organization is not to benefit the association as a whole, or some class, or profession, or some corporation, or some great individual, but the betterment of all the individuals indiscriminately comprising it, the least as well as the greatest. All human association is created for the individual, and any form of social organization that does not recognize this cardinal law of human association will inevitably become extinct. The very function of society, the production of a perfect individual, and thereby the expenditure of energy with the greatest possible economy, would be completely defeated if individualism or class rule could succeed in society. As a penalty against class rule we see the wrecks of Babylon, Egypt and Rome.

Among the social organization of ants and bees, it has been possible to subordinate, subjugate and eliminate the individual completely. There we see class rule in its perfected form. Happily for the human race, all class rule in human society has inevitably ended in social degeneracy and death, else we would have barriers of caste to-day as insurmountable as the specialized functions of ants and bees. After infinite trials at social organization, nature, through the law of natural selection and the law of repetition, originated human society, with the function of producing the perfect individual, because by so doing the most economic expenditure of energy possible is attained.

Mankind is the God Antæus. The rulers of men must touch earth, common humanity, daily, or else they lose their strength, virility. This is not true in one line, but all—government, business, literature, art, the church, science and philosophy.

V

As the doctrine of the divine right of kings robs man of his political rights, so the usurpation of the professions

deprives him of his intellectual rights. To-day while the common man spends a fourth of his life in education, our educational systems are so arranged that he learns nothing which in any way encroaches upon the domain of the professions. The difference among men is not so great as is commonly supposed. The commonest man thinks about the things with which he is concerned as well and as logically as the professional man. The time is approaching in Western civilization, through universal education, when the division of labor known as the professions will have disappeared; for there can be no division of labor in living. This is carrying a device of political economy into fields (the psychical) where its application reverses the process it is intended to accomplish. All men should live. The social organism is opposite to the animal organism in that it is the perfection of its units that is its function instead of the organism as a whole. There is no specialization of functions of the units in the social organism, only exchange of service. The social units are free to move about, and the ideal individual is one able and competent to perform any and all social functions. The units of the social organism are opposite to the units of the animal organism, they having no specialization of function at all. If history teaches anything, it is that no set of men, corporations, professions or classes can monopolize life. The only healthful part of humanity is the common people. They are the race. If the classes and professions were not constantly replenished from the masses, they would become extinct within a few generations. Degeneracy is a natural leveling process. Sooner or later we will have a democracy of knowledge and morality as well as one of political power. As it is now expected that all men shall do the right, the time will come when all men will be expected to know. It is just as necessary that all men should think for themselves, know themselves, in order that society may reach its highest possible mental and moral development, as that every man

shall eat for himself in order that he may reach perfect physical development. It is just as necessary that all the individuals of society shall be developed to their fullest capacity as that all of the constitutional units of the animal body be healthful, able to perform their functions, for in either case, the whole organism's condition is determined by the condition of its units; if they are perfect, it will be perfect; if they are diseased, the organism will be diseased. The weal or woe of society is determined by the condition of its individuals. So let democracy be loved or hated, it is either social democracy or social death; let it be practical or not, it is either social democracy or degeneracy. When social democracy, motivated by a religion based on morality, is sought as a remedy for degeneracy, perhaps it will not be so obnoxious to the lofty, supercilious aristocrat. The function of nature is to produce the perfect individual, and that is the function of society; that is the function of the social organism. Because through a perfect individual, created by a perfect social organism, the energies of nature can be expended in the most economical manner possible; and to more and more economical expenditure of energy in nature is the tendency, seen throughout nature, beginning in physical nature, tracing it through organic, and ending in society. But for the fact that the individual can reach a higher development in society than alone, there would be no society; and society will never reach perfection until it consciously knows that its true function is to develop all individuals to their highest capacity, and realizes it in a perfect socialization of the race. The professions and classes must go with the other rank individualism the race has adopted in order to socialize itself indirectly when not able to accomplish it directly, owing to lack of high intellectuality and knowledge possible only through the professions and classes. Nature is never choice in its means, and always uses individualism to initiate social functions; but inevitably

abandons it when the race has reached sufficient development to adopt social methods. And no matter how difficult of realization democracy is, political, social, intellectual, its realization should be eternally sought after, for through social democracy alone can the social organism be healthful, beautiful, perfect.

To-day if civilization be looked at from the universal point of view, it will be found that the older societies are bound in the most rigid laws, customs, and conventionalities. Beginning with China, we see a type of civilization that is practically stationary, incapable of progress. Passing to the west through Russia, we see humanity living under a society not so rigid, and susceptible of some improvement. Then going to the west of Europe we see society in a still more plastic form. Crossing the Atlantic, we find in the United States the most democratic nation on the globe, but not the most susceptible to advancement of any people owing to its rigid national constitution. Still its government and life are quite variable. Passing still west and crossing the Pacific, we find in Australia and New Zealand the most plastic forms of society in the world. Humanity seems to be able to throw off its old hampering institutions only by migrating. This is the explanation of the migratory instinct that is seen in humanity from the stone age up to the ceaseless migration to the Western hemisphere during the last three centuries. It is one manifestation of the great instinct of religion, for nothing short of religion ever could have sustained man in some of his migrations.

Most of the arguments made by capitalism against coöperation are but excuses similar to those made by the wolf before eating the inoffensive lamb. Men of the world dare not act openly and above board. They keep up a masking of tyranny in the name of liberty, hypocrisy in the name of religion, superstition in the name of science. One's arguments are almost as futile as the lamb's with the hungry

wolf. Yet while the specialized individual almost invariably meets with oppression, still society as a whole is insensibly and unconsciously brought to perfection by the slow actions of the infinitesimal improvements of the specialized individual and the ultimate socialization of the race is an absolute certainty in the course of time.

Society to-day, dominated by the philosophy of Individualism, is really based on immorality. But while our fundamental principles are immoral, yet owing to our theological social sense, we only call those acts crimes which carry our principles to their logical conclusions, such as robbery, murder, and treason; and we wink at and acquiesce in all the adroit and skilful application of our principles to life, no matter if they result in wrongs as great as robbery, murder, and treason, such as exploitation, oppression, class-rule, so long as they are masked in the conventional garb of the time-honored names: Individual Rights, Property Rights, Vested Interests and Public Policy. The only reason we can not live in peace and happiness the world over is because life, being based on a form of Individualism, the expenditure of energy according to the intellect, uncontrolled by scientific moral and social senses, necessarily results in waste of energy, evil, immorality. The only possible way to reach peace, security, happiness and morality, the world over, is to adopt the expenditure of energy by scientific moral and social senses, which will result in universal good—morality sustained by religion, the perfect economic expenditure of all energy, the *summum bonum*; then individualism will be supplanted, and the socialization of the race will be realized.

CHAPTER XXI

THE APPLICATION AND CONCLUSION.

I

Throughout the human race, in every nation, in every clime, there are millions of individuals ready for the new gospel; millions have experienced the new religion. In every newspaper, in every magazine, in every up-to-date book, in the temple of theology, in the laboratory of science, we see adumbrations of the monistic philosophy here taught. The world is ready for intellectual orientation, conscious morality, producing conscious religion. He who sees the truth, let him fearlessly proclaim it; and they who hear will listen, for the hour has come for the proclamation of the solidarity of the race. Social consciousness has dawned, socialization has begun. The incrustations of the ages have been broken, and the young social organism can now grow and develop. As the white corpuscles of the blood fearlessly attack disease germs and die or conquer, let the white souls of humanity, sustained by conscious religion, go forth and battle with ignorance, vested wrongs, social treason, and less daring, less courageous, less altruistic souls will follow, until finally the truth humanity has realized to-day will be a nucleus about which will grow the beautiful, free, conscious life of humanity, perfectly adjusted to its habitat, through verifiable public corporate knowledge, and the perfection of the social organism and the socialization of humanity will have been realized.

The teachers of the scientific social sense to-day will meet with disapproval from the teachers of the theological social sense the same as in the days of yore. And there will be those who will cry, "Crucify him! Crucify him!" And no

doubt a Miletus will come forward with his indictment: "Miletus, the son of Miletus of Pittea, impeaches Socrates, the son of Sophronicus of Alopee: Socrates is guilty, inasmuch as he does not believe in the gods whom the city worships, but introduces other strange deities; he is also guilty inasmuch as he corrupts the young men; and the punishment he has incurred is death."* But withal the socialization of humanity cannot be checked.

The world is sick of theology. If rightly promulgated, a scientific social sense can spread throughout Western civilization in a life time. Science is inevitable. A naturalistic conception of religion is inevitable. It is this or back to the night of the Dark Ages; for supernatural religion cannot rest on scientific knowledge. The intellectual anarchy of civilization to-day ought to show any candid mind the inadequacy of the theological social sense to adapt the race to its environment or the individual to the race. Christianity is in identically the same position that Paganism was in at the decline and fall of the Roman Empire.

Gibbon says: "The spirit of inquiry, prompted by emulation, and supported by freedom, had divided the public teachers of philosophy into a variety of contending sects; but the ingenious youth, who, from every part, resorted to Athens and the other seats of learning in the Empire, were alike instructed in every school to reject and despise the religion of the multitude. How, indeed, was it possible that a philosopher should accept, as divine truth, the idle tales of the poets and the incoherent traditions of antiquity. We may be well assured that a writer conversant with the world, would never have ventured to expose the gods of his country to public ridicule, had they not already been the objects of secret contempt among the polished and enlightened orders of society."—Vol. I, p. 76, *Decline and Fall of the Roman Empire*.

*DIOGENES LAERTIUS, p. 72.

So with us to-day; Christianity is believed, used and ridiculed. Mankind is worthy of a verifiable social sense; worthy of a conscious existence; worthy of a religion that one is not ashamed of and does not have to apologize for, and thus be forever done with acting blindly from instinct, as to-day.

It is not heresy in theological beliefs that ostracises the dynamists of society to-day, but heresy in economic and sociologic doctrines. The oppressors, the exploiters of humanity, the traitors to society, the individualists, all favor orthodox religion, because it makes the race acquiesce in its meager existence; but, as did the Romans of old, they do not object to passing their jests at its expense in private. But the economic heretic, one who opposes established evils, vested wrongs, one who teaches the solidarity of the race, and the social function of property is accursed. There are plutocrats over all Western civilization who contribute liberally to the support of superstitious revivalists like Mr. Munhall and the late Mr. Moody, who would look upon a course of popular lectures on sociology by Prof. R. T. Ely, Prof. Thomas E. Will, Dr. Albion W. Small, or Prof. Lester F. Ward as a public calamity. The cry of "yellow journalism" directed against people's papers is an argument, using the prejudice against sensational journalism to suppress such papers for being socialistic and defenders of the common people. What does capitalism care for "yellow journalism"? But it is more effective sometimes to fight one, and adroitly use the concealed weapon of prejudice instead of the blunderbuss of a bad argument in an open fight. How undignified it will be deemed by the exploiting classes for a philosophical book to stoop to such commonplace things as the foregoing; but fortunately Herbert Spencer, in his *Principles of Ethics*, has set an example, as if the truth needed one!

To millions of thinkers a social revolution, similar to the

French Revolution, seems to be inevitable. It will not come. The orientation of the race will be effected by peace instead of war; by education, not force; by ballots, not bullets. The change to be made is not so radical after all. It is not a change in institutions so much as a change in the kind of facts that are to produce religion. It is the doing of things according to reason instead of blind instinct; according to knowledge instead of custom. In our transitional stage private ownership of property is not what is so very objectionable to true morality and true religion as is the private use of property at the expense of the rest of humanity. If one man can utilize property amounting to a billion of dollars, so long as he keeps all of it in active production, pays wages that permit a high standard of living, or handles the property in the most economic manner possible through profit-sharing or any perfectly just management, there is little room for complaint in our transitional stage of existence, and much to commend. It is keeping out of active production vast stores of capital, in the form of private palaces, yachts, private hunting grounds, private parks, vast quantities of land for speculative purposes, the holding out of production vast quantities of capital to restrict production, cornering the products of the earth, the formation of trusts for private purposes, owning the resources of nature and using them exclusively for private advantage, the hoarding of vast quantities of gold, the manipulating of commerce for the few and not for the many, the organization of civilization in all lines so that it will direct all the products of the earth into a few hands—this it is that is a sin, a crime, a sacrilege against the human race; and not to do the best one can in our transitional period in human development, and be eternally striving to realize the socialization of the race through the moral and social senses. No man has a right to live in luxury while there is not an opportunity for every other man to live free from want. Every individual

on earth is entitled to a home; and it is the duty of every other individual to help him to get it. To live in a palace and be moral, social and religious is utterly impossible in our or any other stage of civilization to come, while another is compelled, although industrious, to live in a hovel. Such a life is a miserable, artificial, unnatural, dehumanized existence. A child reared in a palace can never be a human being in the fullest sense of that word, and is really more to be pitied than one reared in a hut. If the individual would only aim at a real kind of life, that life which will enable us to realize the highest citizenship at our stage of civilization, how infinitely better would this democracy be than the artificial life of our plutocracy with all of its vain pretensions and gilded misery. It is the function of the social sense to teach such a life; and to realize it in the life of every individual is the work of the coming morality. The rich will not be asked to give up their riches, but to use them for the benefit of the race as well as themselves. But if wealth is wasted or persistently used to the detriment of the race, it ought to be confiscated; for it has ever been a law of society to confiscate the wealth of traitors; and who is more of a traitor to the race than the one who openly defies it, persistently uses it and abuses it? Society simply lets the individual hold property in trust for it, because society creates all values; and when the individual betrays the trust by exclusive diversion of the trust property to his own use, he should forfeit it, because he has stopped its productiveness and thus destroyed it.*

This doctrine is but the scientific truth under the teachings of Jesus in his Sermon on the Mount. It is stating

*"At present the State protects men in the possession and enjoyment of their property, and defines what that property is. The justification for its doing so is that its action promotes the good of the people. If it can be clearly proved that the abolition of property would tend still more to promote the good of the people, the State will have the same justification for abolishing property that it now has for maintaining it."—*Administrative Nihilism*, by PROF. THOMAS H. HUXLEY.

intellectually what he stated emotionally. He stated the truth as He felt it; it is here stated as seen. Jesus spoke the truth from the point of view of the moral sense; it is here spoken from the point of view of the social sense. Rich individuals who own nine-tenths of the earth need not fear that the masses will rise in their might and demand a division of property. No. The socialization of humanity will not come about that way. But when a true social sense is worked out by humanity, the smallness of every day life will be felt. Then there will arise in the hearts of all a necessity for the emotion of real religion. The individual will not be satisfied with his meager existence of selfishness; and the work of perfecting the race alone will be competent to arouse the emotion of religion; then the problem of human salvation and human perfection will be solved. The solidarity of humanity, the socialization of the race will be inevitable when science points the way and the enthusiasm of religion is the motor power.

II

When reasoning about the race, reformers are prone to attribute motives to the different classes of society the same as to individuals, and we have done that somewhat in this book, and usually they use invective in denouncing one class for what it has accomplished for itself to the detriment of the race as a whole, forgetting that so far in the history of humanity, society is purely an unconscious product due to the nature of man and the conditions of the earth where the specific society may exist. But just as it has been impossible for me in writing this book to keep from using teleological language in describing the processes of nature, so has it been impossible for me to keep from attributing motives to the different classes in society in their actions upon one another. This form of expression is absolutely necessary, for men cannot understand facts stated in language other

than their own. But let us be as scientific as we may, there comes a time when class feeling becomes conscious, and classes act with a motive just as individuals do, and they are perfectly responsible and amenable to the race as a whole; for example, the French nobility just before the great Revolution and the English nobility of to-day.* And capitalism to-day in the United States shows its class consciousness by endowing universities to teach its particular doctrines, subsidizing the public press to popularize them, and contributing to the support of Christianity (which, if true, would send every mother's son of the capitalists to hell; but which none of them believe in), and fostering it on account of its conservative teachings and its benumbing effects upon the oppressed and exploited, holding them in docile subjection.

The race has known several different forms of existence, which may be named from the prevailing form of labor; for example, animal idleness, slavery, feudalism, capitalism. Now it is certainly not deep thinking to attribute to the slave owner conscious motives in establishing slavery. It grew up in society simply because under it the race could

* "The British aristocracy envisages itself as no harmless absurdity, no antique caricature, but a genuine and powerful and living dragon, to be faced and fought, a demon to be exorcised, a barrier and a stumbling-block in the path of progress, to be removed by pick and ax by the arms of Democracy, as soon as ever that somnolent and thickheaded mob awakes to a sense of its true interests. . . . But the worst of all of its corollaries is undoubtedly this—that it stands hopelessly in the way of the recognition of all real betterness. Nobody is anything by the side of a peer. His visible greatness eclipses all else. There is not a country so lord-ridden as England; there is not a country where literary men, artists, thinkers, discoverers, great scientists, great poets—the prophets and seers of the race—fill so small a place comparatively in the public estimation. . . . No one can quite free himself from this hateful superstition. One can not isolate one's self absolutely from one's social atmosphere. And all this is part of the effect, though in part the cause, of the continued existence of so absurd an anachronism as the British aristocracy. . . . Every reformer in England knows how fatal to the spiritual and intellectual life of the country, quite as much so as the political and social development, is this debasing and degrading element in the community. England can never be free, wholesome and whole-souled till she has cast out forever these belated Gods and learned to pay homage to the shrine of the Genuine Betterness."—GRANT ALLEN.

accumulate more property, wealth, than under free labor, or no labor as in the savage state. It conserved more of the energies of the race than free labor; it was more economic. It succeeded, not on account of the craftiness and cruelty of the slave owner, but because under it the race everywhere could accumulate more wealth than under free labor; and because wealth is the most important means to civilization, and it does not matter how it is produced, so it is produced. Wealth is the blood of the social organism. Following slavery was feudalism. It was an improvement upon slavery. It was a more economic expenditure of energy than slavery. Feudalism was not consciously devised, but initiated by some individual or tribe, and it was adopted by the race on account of its economy. It was certainly the best form of life possible to human beings with no higher social sense than the people of the Dark Ages. Feudalism gave way to capitalism, because capitalism is better able to produce, to conserve the wealth of nations. It is a more economic way of expending energy. The capitalist did not invent the system. It grew up unconsciously and exists to-day because in the struggle for existence between nation and nation capitalism expends human energy more economically than any other form of industry yet devised by the race.

It will be seen that there is a progressive degree of economy in each of these systems of industry beginning with animal idleness and ending in capitalism. History shows that these forms of industry have been universal, and whenever a nation inaugurated an improved form, the other and rival nations followed it. It will be so with coöperation. Coöperation is the most economic form of expending human energy ever invented by man. This is shown in the private coöperation of our great trusts and in our coöperative institutions, such as our common schools. That nation which first adopts coöperation will secure an advantage in the struggle for existence between nation and nation that will compel the

other nations of the world to adopt it or else fall behind in civilization. When an improved form of expending energy is discovered, it inevitably is adopted by the whole race, although it may take centuries. China as yet has not fully adopted capitalism, but it is rapidly doing so. Japan effected the transition within less than one century. One nation forces another to adopt its methods of expending energy or else supplants it in the struggle for existence. Systems of finance, systems of taxation, systems of labor, systems of living are inaugurated by one nation and pass to all humanity. A few years from now a savage will be as rare as a gorilla is to-day. And just as advancing humanity has ever forced its improvements upon its tardy brothers, so to-day will that government which first adopts government by public corporate knowledge, conscious existence, coöperation, force the world to its position. That form of expending energy in society which is the most economic will ultimately prevail, because civilization is but a problem in the economic expenditure of energy, no matter if it takes devious courses in amusement, fine art, religion. The greatest economy can be effected only by a social organism which can be developed only by these apparently uneconomic methods of expending energy. And good souls need not worry about the final triumph of coöperation and socialization, and the individualist need not be jubilant over the iniquitous distribution of property to-day that drifts all of it into his own hands; for ultimately the most economic form of expending human energy will be arrived at and will obtain here on earth—coöperation under a pure democracy. Just as one nation instinctively adopts the methods of its rivals in warfare, so will all the nations of the earth imitate one another according to the law of repetition, when some nation adopts coöperation, let it be monarchic Russia or republican New Zealand. It takes no coercion to get ideas of economy practiced; they need only be known to be

adopted. Human energy is similar to any other energy; it follows the line of least resistance or greatest attraction, and when the way is once opened to it, it inevitably goes that way in spite of all obstruction.

The capitalistic society to-day time and again has been accused of maintaining its position by nefarious means, but this is not strictly true, for capital invariably takes the most economic form of expenditure, for by so doing it is thus saved. It is not only the social democrat who advocates coöperation to destroy competition in order to save human energy, but also the trust magnate. But the social democrat does not stop there; it is he who advocates the nationalization of public utilities so that there will be as much economy in the distribution and consumption of capital as in its creation. The favorite literature of the exploiters of the race is the works of the socialists, sifted through college professors. The principle of coöperation was originated by the socialists to be applied to humanity as a whole; but the trust magnates, not being so generous, apply it to their own use to the detriment of the race as a whole. But this is only another example of the application of a social principle by society through individual effort, owing to the inability of society as a whole to apply it directly to itself. It is in this way that social processes are always initiated. The trust magnate does not bother himself about the morality of the situation. He plans to destroy competition, not that he hates competition, but because he wishes to economize capital, knowing competition dissipates it. The trust magnate often acts blindly. It is the socialist who traces the operation to its source, and tells what has been done, that gets to the bottom of things. Facts go before theories; and knowledge before institutions.

The function of capital is to benefit the race directly, the individual indirectly, and not the few capitalists who manage it. Capitalism has grown up in society, because with

his present intelligence and morality the individual is not competent to adopt any other system of industry; and nature, not being choice of means, takes what is at hand and lets it go until something more economic is found available. To create capital simply for the purpose of seeing it accumulate would be to turn the race into a miser, which is certainly not the function of wealth. To let the race accumulate it for the pleasure of the individuals who manage it, to let them turn it to their own advantage would make humanity a host and the capitalist a parasite, which certainly cannot be the ultimate function of wealth; yet it is the contention of capitalism. Capitalism makes wealth beneficial to the race according to natural law; it is wasted in dissipation and neutralization under the laws of competition, and not conserved in distribution and consumption according to the moral and social senses. Coöperation would direct wealth into channels making it benefit all and be a detriment to none, and thus realize the true function of wealth in the socialization of the race. Capital, to be perfectly economic, should be used for the race as a whole, and not the individuals who control it; for it is purely a product of the race, gets its value from the race, and is produced and accumulated by the race.

Of what use would gold be to a man on an uninhabited island; what benefit would a railroad have been running through the North American continent at the beginning of the eighteenth century? Capital is capital on account of the needs and wants of civilized humanity; it is purely a social product, and it should serve a social and moral purpose, that of creating a perfect individual by creating a perfect society; and it will do so when the energy of society is expended not only in production, but in distribution and consumption along the most economic channels possible. But economy in the consumption of capital is not the greatest which conserves it best in the sense of saving it, but

that which consumes it best in the development of the individual mentally, morally and physically. In the use of capital for the development of the individual or the perfection of the social organization, extravagance is the greatest economy. The great mistake in thinking along this line is to believe that economy is always saving, and that the management of capital, which results in its accumulation, is the best. It is not so. This is the policy of the miser. Energy in human society not only expends itself along the line of least resistance in opposition, but along the line of greatest attraction. Energy is expended in play as well as in work; in fine art, as well as in useful art; in moral development, as well as in physical. Capital does not serve its true function if, finally, it does not dissipate itself in the perfection of the individual, and thereby the perfection of the race. The ultimate function of capital is the perfection of the race. If accumulating wealth alone was the function of civilization, then indeed would capitalism be the best form of society; and not only that, but all wealth should be put into as few hands as possible, so it could not be consumed at all. This is the logical result of capitalism, and is the *reductio ad absurdum* of its principles. But the true theory of property is that its function is purely social. Each individual should receive a sufficient amount of property for his service, whatever it may be, that will enable him to realize his highest nature, mentally, morally and physically; so that he may reach perfection through society. Property is the life blood of the social organism, and to perform its true function, it must be distributed throughout the organism, supplying each individual according to his needs, so that he can render service to the social organism according to his functions.

But the present capitalist class either dissipates the vast wealth entrusted to it by society on private follies, vices and luxury, or it uses it to keep up vast nobilities, plutocracies and idle classes, resulting in the poverty of the people

through useless and wicked wars and preparations for wars, including the world's pernicious military systems of endless armies and ever increasing navies. This is not only a great wrong to the race, but also to the capitalists themselves, for such a form of life invariably ends in misery and degeneration to all. Only that capitalist is happy and healthful, mentally, morally and physically, who recognizes the social function of capital, and lives simply and directs his vast wealth to the betterment of the race, mentally, morally and physically. Gorgeous palaces, private parks, beautiful art galleries which are not open to the public are a misdirection of capital. The "smart set" of society, from one end to the other, does nothing, but misdirects and wastes capital. Wealth is produced by the public and for the public. The greater part of wealth is wealth because it supplies the needs of the people, and it is this part of wealth that the public produces; and hence wealth should be a public store for the purpose of perfecting the individual and society, and not for the amusement of a class of idle dunces. What we are all after is happiness, and if simple living is the way, gilded misery is no better than squalid poverty. All the great, the good, and the beautiful things should be open to all. It is the direst waste to make some great product of art personal property. It does not diminish it in value to let the whole world see a picture or read a poem. The wealth of the world should be used in creating good, useful and beautiful things, not for a few, but for all.

Despite our great knowledge, despite our religion, we still blindly battle for property, sustained by the savage instinct to accumulate, which originated in the race when starvation stood us in the face every day. The chief obstruction now to the development of the race, when property, owing to machinery, is almost as plentiful as air and water, is this same blind instinct to accumulate which makes it as difficult to get a living to-day, owing to the obstructions of self-interest in

distribution, as it was in the days of the dire privations of savagery. The acme of capitalism as we see it to-day demonstrates its incompatibility with the socialization of the race or any higher development of the race.

III

The method of action from public corporate knowledge cannot supplant the method of action from private corporate knowledge only by actually doing so. It is useless to hope that persons engaged in injurious or wasteful enterprises, which support them at the expense of society as a whole, will give them up, because such enterprises are shown to be injurious to society as a whole. Thousands and thousands of persons to-day see the waste of competition, but bitterly oppose public coöperation because of self-interest. The love of money is so much stronger than the love of humanity that no amount of argument will ever make the capitalist class surrender its privilege of using social energies for individual and class advantage. Society must compel capitalists to abandon expending energy by the fourth law of motion, the intellect, by introducing action by public corporate knowledge, the fifth and sixth laws of motion, the moral and social senses, to compete with private corporations, and thus supplant them; then our better life will dawn upon us.

Property is one of the greatest of human inventions. Without it man is a helpless, useless animal. Its creation is so necessary to the race that no matter how accomplished, society has always justified it—slavery, serfdom, wage labor. But property is only a means to an end—the perfection of humanity. It cannot perform its function under the control of the individual except in the most wasteful manner. Competition in society is simply the struggle for existence seen throughout nature and dissipates its energies by opposition, neutralization and waste, instead of along the line of least resistance selected by knowledge and morality, the

moral and social senses. Competition expends energy blindly and results in the greatest waste instead of economy; yet it is the highest form of expenditure that can be realized under capitalism and individualism. Under it humanity can never reach perfection, for the wealth that should be expended in human development is wasted in competition. See how foolishly great philanthropists spend their money for public good; little better than waste. Charity is really worse. The individual prompted by selfish motives can do little more than waste energy. To raise property up as a god, to have it crush the aspirations of the race by worshipping it, is to create a Frankenstein, in hopes he will perfect the race with his superhuman strength, when, in fact, he turns upon it and destroys it. Man may as well have remained a savage as to have created the means of socialization, wealth, then have socialization denied him on account of making the means an end in itself, and worshipping it, as capitalism does to-day. To create property, the old instinct of the clan, the love of kind, the production of all for all, had to be set aside for individual acquisition, thus giving a greater incentive to production; but little would one have thought then that the time would come when the love of property would become so much stronger than the love of kind, that is, religion, that it would hinder the perfection of the race as it does to-day. It is all due to the absence of intelligence and morality in nature, matter and energy; it pursues one line of development as far as possible, then takes the opposite; the socialism of the primitive tribe being abandoned for individualism in order to create wealth, because it could not be initiated in any other way, to be abandoned in its turn when social acquisition through coöperation is possible, as to-day. It is to property that we owe the monogamic system of marriage, an institution that enables a man's children to inherit what he owns. It is to property that we owe civil government; for civil govern-

ment is based on property in land. After doing so much for the race, to think that the worship of property is to keep mankind eternally from once more entering upon a relationship based on service to the race, based on religion, because of man's abnormal love of wealth, is indeed a sad and distressing thought! All the other instincts of human nature have sunk into abeyance before this all-consuming power, the love of money. For it men sacrifice love, honor, religion. It has reached the acme of its power, for the light of the social sense in oriented man will direct this blind instinct, this mob-like frenzy, love of money, into rightful channels, and wealth will yet accomplish its true function, that of perfecting the social organism.

The form society takes, let it be feudalism or capitalism, depends upon the moral and social senses of the given society, and not upon the caprice or design of some ruling class. It makes no difference, be the form of economy slavery or wage earning, the race as a whole adopts it, and it is upheld by the whole of society, by the oppressed as well as the oppressor, and one is as responsible for it as the other; because it is a result of the moral and social senses and not of individual preferences. And when the time comes in a society to change its form of industry, it is as often done by the oppressing classes as the oppressed, if not more often. The great socialists of Western civilization, William Morris, John Ruskin, Robert Owen, and others, have also been great capitalists. The inauguration of coöperative democracy will come, not alone from the oppressed, but from the oppressors, unconsciously by founding schools, consciously by inventing laws that will more equitably distribute property; unconsciously by forming trusts, consciously by working as active reformers educating the people to their rights and privileges in the wealth of the world.

It was not chance that made slavery a form of industrial life, or feudalism, or capitalism; but it is due to the nature of

things, the development of the moral and social senses of the race. The industrial systems of widely different peoples follow identical lines of development, due to the same physical conditions and to similar development of the moral and social senses. This is another manifestation of the law of repetition. The height of civilization depends upon the expenditure of energy in society. If the expenditure be according to the fourth law of motion, the intellect, unmodified by the fifth and sixth laws of motion, the moral and social senses, or, according to a low form of the moral and social senses, the civilization will be low in development; but if it be from a high form of the moral and social senses, then it will be high in development, and all energy will be expended along the line of least resistance or greatest attraction.

Economy in the expenditure of human energy does not mean the accomplishment of results with the least possible expenditure of energy; but the realization of the highest form of the true, the beautiful, the good and the useful, with the least expenditure. The function of saving human energy is not the accumulation of energy, but the right expenditure of energy. Man accumulates property blindly, instinctively; but its true function can only be realized when it is expended according to the moral and social senses, then the expenditure will be for the benefit of the whole race, not of the capitalists or their degenerate offspring. It is preposterous to think that society must sit idly by and see degenerates waste its hard-earned wealth. The twentieth century by its half century mark will see the last of this form of crime.

Some day in the not distant future there will dawn upon the minds of the capitalists of the earth a true social sense which will make them see their duty to the race; and there will come into their lives a true moral sense which will enable them to put their knowledge into practice, resulting

in religious ecstasy, the greatest feeling known to the human heart. The ideal systems of socialism, nationalism, or social democracy, or the social expenditure of energy, as we conceive it, may never be adopted, for no one can predict the future of humanity specifically; but the truth that these reforms stand for, which is now smothered in our system of living, will appear and in due time be realized in the life of humanity. How slight a change will have to be made to realize all that poet, sage and prophet have hoped for! It is not so much a change of laws and institutions as a change in feeling and thought—to run them according to the spirit and not the letter. It is not so much a denial of private ownership of property as a definition of what the rights of ownership shall be. It makes little difference whether one man or all men own the earth, but it makes all the difference in the world how the earth is used. The earth is for the use of all, no matter who owns it. If the device of personal property keeps the irresponsible classes from wasting the wealth they produce, it is a good thing; but when, through education, through development, there are no irresponsible classes, then private ownership keeps all out of their birthright, perfect development. If the right of the race to the use of the earth be denied, but one thing can follow, a conflict for its possession. No doubt in the coming history corporate society will often be compelled to relieve individuals and corporations of their trusts. Property amongst men will be the great bone of contention until human existence becomes so secure and so reasonable that property will become like sunlight, air and water. Then the business of life will not be with the instinct of self-preservation, egoism, or the preservation of offspring, love, but with the instinct of perfecting the race, religion. The principles that control the civilized man to-day control the savage. The object of life to-day is food, raiment, shelter. It was so in savagery. Civilization is little more than highly devel-

oped savagery. Perfect civilization will be to live, not to secure life, not to hand life down, but to realize a perfect individuality by realizing a perfect society. And to say that such a life is impossible is blasphemy, and he who speaks it is an infidel to the human race and is accursed!

IV

Individual morality is the action of the individual as controlled by society. Social morality is the conscious action of society as an organism. That society is responsible to the individual is a doctrine unrecognized except by isolated thinkers. We have only dim adumbrations of social responsibility in such doctrines as the right of revolution, the right of self-government, the right of religious worship according to the dictates of one's own conscience. These rights are conceded by society to the individual in proportion as knowledge is distributed throughout society; society thus acknowledging its responsibility to the individual. Individual morality will be secured, that is, vice, sin and crime will cease, when society is able to control the individual through the moral and social senses. Social morality will be secured, that is, there will be no more poverty, struggle for existence and war, when society is controlled by the moral and social senses; then the functions of society and the individual will be reciprocal. The present control of the church is similar to what the ultimate control of society will be as an organism in the future; that is, it will be psychical, spiritual, not physical.

During the history of the race there have been three forms of morality: negative, positive and social. Negative morality is found among the most primitive of peoples; positive among civilized races; social morality is the morality of the most advanced persons to-day, and will be the morality of the individual and society in the future. The first form of moral control dictated what actions should or should not be

performed. It appealed to the negative sanction of the moral sense, conscience. Its method of guiding individual energy was that of inflicting pain for its expenditure through prohibited channels. It controls through fear, superstition and pain. This is the morality of the tribe, and while it is very intense, it is very low. The head hunters of Borneo, if prevented from obtaining the required number of heads to give them caste with their tribe, will pine away and die; their compunction of conscience is so intense. Nearly all savages have similar moral and social senses resulting in similar customs.

In the next higher development of morality, society adopted the positive sanction of the moral sense, duty, as the cardinal thing in morality. Negative morality aimed to control actions and thereby secure good conduct; but positive morality aims to purify the actor. Its command is not to do, but to be; not thou shalt not, but be thou pure in heart, be noble, be good, be true, do unto others as you would have others do unto you, going on the erroneous supposition that all actions prompted by good motives will be good of necessity. This form of morality appeals chiefly to the positive sanction of the moral sense, duty. Positive morality aims at the complete suppression of the anti-social energies. In its extreme form it manifests itself in asceticism, as in Buddhism, early Christianity and pessimism as taught by the great philosopher, Schopenhauer. In its most reasonable form it manifests itself in the doctrine of love, charity, philanthropy. It teaches the brotherhood of man and the fatherhood of God, in the latter doctrine adumbrating the supreme power of the social organism when the socialization of the race shall have been realized.

The third and highest form of morality is social morality, morality by verifiable public corporate knowledge, morality by the social sense, the morality of religion. It does not aim to suppress energies or to purify them, but to show the indi-

vidual the most economic way of expending all of his energies, and thereby doing away with all neutralization, opposition and waste of human energy whatsoever. Its method of guiding individual energy is that of rewarding its expenditures in chosen channels with the most exhilarating happiness possible to the human heart, religious ecstasy, making the individual's social functions as joy-producing as his animal functions now are, and by punishing its expenditure in forbidden channels by the keenest pain known to the human heart, guilt, despair, misery. Just as the highest form of individual action is from the intellect, so the highest form of morality is from the social sense. Under social morality the moral sense will do away with vice, sin and crime; the social sense will abolish poverty, the struggle for existence and war. The perfection of the individual will be secured through the perfection of society. Religion will be the conscious motor power of the individual in perfecting the social organism, and will produce the most ecstatic, lasting and compensating joy known to the human heart. The doctrine of social morality is not to do, or to be, but to know. It appeals to the sanction of public corporate knowledge, the social sense. The highest command of negative morality is, Thou shalt not; of positive morality, Be pure in heart; of social morality, Thou shalt know. The most important thing in life is knowledge, for on it depends every thing else. Thou shalt know how to act so that no human energy can be wasted, is the new commandment of the religion of morality.

The first form of morality is the doctrine of authority; the second is the doctrine of love; the third is the doctrine that public corporate knowledge is the highest tribunal. Negative morality restricts the expenditure of energy; positive morality purifies it; social morality directs it into the most positive economic channels. The impotency of the negative morality is due to the fact that it is action controlled by blind feeling; it simply defeats a bad action by

opposing it. This is morality by brute force, and is always accompanied with some gross superstition for a social sense. The impotency of positive morality consists in the errors, first, that there are two kinds of human energy, good and bad, when in fact all energy not expended according to public corporate knowledge is more or less bad; and, secondly, that good energy, a desire to do good, a good motive, can dispense with guidance simply because it is good. Positive morality is accompanied with an unverifiable social sense, and the religious worship of an imaginary God. It wastes its energies in futile work and vain ceremonies. It is useless to tell individuals to do unto others as they would have others do unto them, when the individual is controlled by self-interest. This would be an open field in a gambling game, an interminable conflict. What is needed is not only the desire to do good, but a knowledge of how to act so that no energy can be wasted; for waste of energy and evil are one and the same thing. It takes just as much knowledge to conserve a good energy as a bad one; for every energy not directed by verifiable public corporate knowledge is wasted more or less. Religion based on social morality satisfies the individual in his endless quest for a greater life by supplementing his life with the great life of the social organism. But these systems of morality do not supplant one another, they only supplement one another. The morality of knowledge uses the machinery of negative and positive morality, the community, the church, the school, the state, to spread its teachings; and positive morality but needs to borrow the enlightenment of verifiable public corporate knowledge to expend its energies perfectly. Under social morality religion will be due to every act that conserves, protects and perfects social organization. Morality and religion will sustain to each other the relation of cause and effect, and nothing will produce religion but morality, and life will be composed of the reality before us and the destiny of the human race.

It is time our great men ceased reading new ideas into old theologic forms, and boldly say what they mean. Just as the Greek philosophers were handicapped by being compelled to interpret the truth as they conceived it in the mythological terminology of their day, so are we compelled to use the terminology of Christianity to-day for thought, or else bear the persecution of neglect, lack of recognition, intellectual ostracism. What indignity did not that fine mind, Auguste Comte, suffer in being compelled to live on charity from lack of appreciation and support by his age! Think of the bitterness of Arthur Schopenhauer at sixty-five and unrecognized! What a comment on the civilization of the nineteenth century when Herbert Spencer, owing to lack of patronage, seriously contemplated stopping the publication of his *Synthetic Philosophy* before it was half finished! What dictation when Charles Darwin, in 1859, circumscribed his theory of natural selection at the command of theology, not publishing the law of natural selection as applied to the race in his *Descent of Man* until 1870! How the influence of Thomas H. Huxley, John Tyndall, Ernst Haeckel, has been limited by the cries of theologians! And how many lesser lights to-day, teachers in colleges, writers in magazines, editors of newspapers, are compelled to use language to conceal the truth, as the Pythagoreans of old, instead of expressing it!

V

There is something more in life than merely to live, to exist. To live for the human race, to die for it, if need be, is religion, the supreme happiness. All individual feelings pale into insignificance beside it. Religion is the *summum bonum* of existence, and the truth will never be spoken until religion is the motor power back of its expression; for religion is the only triumphant emotion the human race possesses. It is supreme over death, oblivion, and all

the foul-mouthed slander that partisan venom can spit, with its vile and corrupt tongue. Religion alone can perfect the race.

The reason nothing moral can be done in society to-day, no reform be made, no improvement secured, is because we have no religion. The people being devoid of religion neither demand nor expect justice. They act upon the popular fallacy that some how or other, in the unequal division of things, they are going to get the big end, and are deluded with this treacherous hope into acquiescing in being oppressed and exploited. An honest, sincere desire to do right because it is right, to do unto others as you would have others do unto you, is unknown in practice to-day. The church sits idly by as a social club and lets its function of creating the moral and social senses go unperformed. The evils it denounces are trivial; the ones it overlooks and winks at gigantic. The great Pope of Rome, just when Russia and Japan are upon the eve of declaring war, denounces the wearing of décolleté gowns! The church is almost totally devoid of religion. The masses go to church from superstitious motives; the privileged classes from policy. Its communicants are not filled with the Holy Ghost as in the days of faith; but more often with holy disgust.

Life is almost totally devoid of religion. It is hard, cruel, niggardly. The pitiless hand of greed grasps the property of the world, and the pallid face of poverty excites no sympathy. If our statesmen were religious, they would serve the people instead of being the retained attorneys of privileged individuals and classes. They would be statesmen actuated by the holy desire to serve the race instead of the selfish purpose, as to-day, to serve party, clients, and classes. If the public press was imbued with religion it would help to make all humanity sensitive to the wrongs of even its weakest members, instead of toadying and truckling to rich and powerful degenerates. If the press were imbued with

religion, it would be dominated by moral courage, instead of the commercial spirit which would sell man's birthright for thirty pieces of silver. If the school were religious, then our children and youth would have developed in them the cardinal virtues as well as the intellectual graces, a perfect character as well as a perfect physique. Man would be adapted to nature and society consciously, and the teaching profession would be the greatest, the most honorable of any in all history. If every-day life were religious, then loving-kindness, mutual service, coöperation and confidence would result in the socialization of the race, and the greatest happiness to the greatest number would be realized.

No wonder we fail! We have no religion. The church has forgotten what religion is. Science has not learned. In guarding her dogmas the church has let their spirit escape. In protecting the symbol she has killed the thing symbolized. Religion is the great dynamic, the great power. It alone can perfect the race. It can cause all of the vast wealth of the world, now wasted in wars, in gilded aristocracies, in cruel plutocracies, to be turned to the development of perfect human beings, its true function. All that is needed is the spread of this divine fire, so that it will compass the earth and purify the entire race. When the world is once more possessed of the great enthusiasm, religion, guided by the moral and social senses consciously developed, then the socialization of the race will speedily follow. Instead of men being ambitious to be millionaires, they will be ambitious to make millions of human beings happy by applying the moral and social senses to existing humanity; and the compensation to them in religious ecstasy will be incalculably more joy-producing than the materialistic success of to-day. Instead of statesmen plotting and planning to increase the territory of their respective nations, they will plan to make their respective nations outdo all the rest of the nations of the world in the economic expenditure of

energy, thus destroying privilege, class and caste; and the glory following will far outshine the partisan fame a fortunate statesman is grudgingly allowed to-day. And scientists will not only be statical investigators, but dynamic agents applying knowledge to human ills. And the churchman instead of bending all his energies in collecting money to support the various missions of the church to convert the heathen in foreign lands, will spend his time and energies in applying the moral and social senses to every day life, realizing religion in mutual service, in the reciprocal function of responsibility and protection of one for all and all for one; and then life will be dominated by loving-kindness, sympathy, intelligence, peace and happiness, instead of the interminable turmoil we have to-day. Give us religion and the race will be saved. It is the great need of the world to-day. It is the only dynamic that can mould the race into one vast social organism. Without religion humanity stands a slave to necessity, a freak of chance, a blind monster; but with it, it is the master of nature, the mind of the universe, the great God the poets and prophets in all ages have foretold and humanity has ever longed to meet face to face!

VI

It may seem visionary to many to think that the numerous functions of the social organism can be controlled by verifiable public corporate knowledge, but it certainly is no more difficult of realization than the control of the individual by ideas, by reason, was before it was accomplished; and that has been fully realized in the civilized individual of to-day. Is it not really more remarkable to think that civilization can be a result of blind feeling than that it can be controlled by verifiable public corporate knowledge? The facts are that while we think God controls society, it is really controlled by blind human feelings, expending

themselves in opposition and neutralization, instead of according to the line of least resistance selected by knowledge. If we correctly see how society is run to-day, it will help us vastly to see how it should be run by public corporate knowledge, and we wonder why the socialization of the race is not accomplished as soon as understood. But the social organism is an organic growth and can only be realized according to its laws, and sometimes too much haste, instead of resulting in progress, results in retrogression. But whatever is built on the firm, broad knowledge of science will surely reach perfection in the course of time.

All the grand thoughts, all the beautiful imagery, all the great truths of science and literature can be expressed by the different arrangement of the twenty-six letters of the alphabet. All the wonderful music of the world can be expressed by the different combination of the eight notes of the musical scale; and everything can be numbered with our ten digits. All the manifold machinery of man is but different combinations of the six mechanical powers. Nature works with but few materials, and, being devoid of mind, its products are devoid of art (the most economic expenditure of energies and materials); but when society reaches public corporate control, it will be all that nature and mind can produce with the energies of nature and the energies of the individual expended in the most economic manner possible; hence the resulting civilization will have all the use of practicality, all the beauty of art, and all the strength of nature. It takes but a few feelings to produce civilization, for they all work to the same end, but by slightly different methods; hence opposition, neutralization and waste, and in the final adjustment a low grade of civilization. A knowledge of human feelings and emotions distributed throughout society by a scientific system of schools, beginning with the kindergarten and ending with death, will enable society to direct its energies by public corporate knowledge into public cor-

porate channels. This will be perfect socialization, a system of life in which the individual will be perfectly corödinated with society, and will derive as much pleasure in perfecting its structure and performing its function as he now derives in performing individual functions, almost his sole source of happiness to-day.

When the law of action from public corporate knowledge is applied to society as a whole, then the equilibrium of the social organism as an organism with its environment will be consciously secured. Order and progress will be the moving equilibrium of the social organism as structure and function are of the animal organism. The realization of this desideratum with the energies now at work is but a question of time. The perfection that the human race has dreamed of since its infancy to be realized in another life is a prophecy of the life to be realized here on earth when the race is controlled by the moral and social senses. There is not a particle of doubt but that the application of knowledge to the development of the individual and the perfection of society will result in just as much improvement in them as the control of the physical energies of nature and the development and perfection of plants and animals resulted in them; the problem is to make the application. The race in the nineteenth century unconsciously did much to perfect the individual and society; but now that it knows the true function of knowledge, the ultimate perfection of the individual and society is but a question of time.

By commencing our investigation at the beginning of things and ending it with the socialization of the race, we have compassed the entire field of knowledge in our survey. We lose much at the start out by rejecting the theological social sense, Christianity, and not reading our philosophy into it; but what we lose in the initiative will be more than compensated for when once the world is set aright so that it can pursue its destiny consciously, knowingly, scientifically.

Sooner or later orientation had to come, and we might as well break the ice as any one, for the ultimate destiny of humanity is conscious existence, and cannot be achieved otherwise. There is no use to drag the world of error with us when by one heroic struggle it can be cast into oblivion forever, and the progress of humanity be henceforth impeded only by the necessary obstacles in the nature of things.

At vast intervals of time in the history of the race there have occurred great epochs of improvement in civilization with prophecies of a perfect existence yet to come. It makes no difference what race we study, we find the same history in all. In the East, Brahminism was followed by Buddhism with a promise of Nirvana; in the West, Judaism was followed by Christianity with a promise of heaven. It is this perfect existence, dreamed of by the race since its beginning, the socialization of man, that we enter upon to-day. And the step we take, whether it be large or small, is left to the world to judge.

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